January 2009

	To	tal Amount Handled:	256,092.66		0.0237
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Rail Direct to Vessel					
_					
OTHER PRODUCTS ¹	(no storage of oth	er products)			
on mouse (mile)	1 10110	7.00L-00	33,437.04		0.0063
Un-Treated (White)	PM10	4.60E-05	87,718.64 39,437.64	7 7	0.0071
Treated (Red)	PM10	2.30E-05	07 740 64		0.0074
Rail Direct to Vessel	-				
Un-Treated (White)	PM10	4.60E-05	52,128.37	5	0.0060
Treated (Red)	PM10	2.30E-05	25,730.26	5	0.0015
Storage to Vessel	50116				
04					
Un-Treated (White)	PM10	4.60E-05	31,433.30	3	0.0022
Treated (Red)	PM10	2.30E-05	19,644.47	3	0.0007
Rail to Storage					
		lbs/ton	(ST This Mo)	points	(short tons
	Туре	Ε	Handled	of transfer	
Emission Source	Emission	Emission Factor	Amount	Number	Emissions
		Controlled			

^{1.} No other products are currently handled, however, other dry bulk products may be handled in the future.

February 2009

	To	tal Amount Handled:	47,367.67		0.0055
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Rail Direct to Vessel					
OTHER PRODUCTS	(no storage of oth	ner products)			
Un-Treated (White)	PM10	4.60E-05	20,854.00	7	0.0034
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Rail Direct to Vessel					
On treated (Winte)	1 10110	4.00103	7,002.00	<u> </u>	0.0009
Un-Treated (White)	PM10	4.60E-05	7,602.00	<u> </u>	0.0000
Treated (Red)	PM10	2.30E-05	0.00	5	0.0000
Storage to Vessel					
On- Heated (wille)	PIVITO	4.60E-05	18,911.67	3	0.0013
Treated (Red) Un-Treated (White)	PM10 PM10	2.30E-05	0.00	3	0.0000
Rail to Storage	DM40	0.005.05			
5 6.		lbs/ton	(ST This Mo)	points	(short tons)
	Туре	Ε	Handled	of transfer	
Emission Source	Emission	Emission Factor	Amount	Number	Emissions
		Controlled			

Notes:

March 2009

	To	tal Amount Handled:	62,887.04		0.0071
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Rail Direct to Vessel					
	(croinge of on	J. p.00000,		· · · · · · · · · · · · · · · · · · ·	
OTHER PRODUCTS	(no storage of oth	er products)			
	1 14110	7.00L-00	20,730.41		0.0041
Un-Treated (White)	PM10	4.60E-05	25,756.41	7	0.0013 0.0041
Treated (Red)	PM10	2.30E-05	16,656.40	7	0.0042
Rail Direct to Vessel	 				
Un-Treated (White)	PM10	4.60E-05	10,174.39	5	0.0012
Treated (Red)	PM10	2.30E-05	0.00	5	0.0000
Storage to Vessel	D1440	205.05			
04					
Un-Treated (White)	PM10	4.60E-05	3,295.89	3	0.0002
Treated (Red)	PM10	2.30E-05	7,003.95	3	0.0002
Rail to Storage					
		lbs/ton	(ST This Mo)	points	(short tons)
•	Туре	E	Handled	of transfer	
Emission Source	Emission	Emission Factor	Amount	Number	Emissions
		Controlled			

Notes:

April 2009

		Controlled	Ţ.		
Emission Source	Emission	Emission Factor	Amount	Number	Emissions
	Туре	E	Handled	of transfer	
		lbs/ton	(ST This Mo)	points	(short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	3,512.00	3	0.0001
Un-Treated (White)	PM10	4.60E-05	13,318.63	3	0.0009
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	5	0.0000
Un-Treated (White)	PM10	4.60E-05	1,609.95	5	0.0002
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	10,032.85	7	0.0016
OTHER PRODUCTS	(no storage of oth	er products)			
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
	To	tal Amount Handled:	28,473.43		0.0028

Notes:

May 2009

······································	To	tal Amount Handled:	63,840.35	<u> </u>	0.0082
On-Treated (Wille)	FIVITO	4.00E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05		•	0.0000
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Rail Direct to Vessel	-				· · · · · · · · · · · · · · · · · · ·
<u>-</u>	(no storage of oth	er products)			
OTHER PRODUCTS	(no storage of oth	or products)	-		
	1 147 10	7.00L-03	20,010.10		0.0037
Un-Treated (White)	PM10	4.60E-05	23,075.10	7	0.0000
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Rail Direct to Vessel	†				
On House (Mino)	1 10110	4.0012-00	30,329.90	3	0.0042
Un-Treated (White)	PM10	4.60E-05	36,529.90	5	0.0000
Treated (Red)	PM10	2.30E-05	0.00	5	0.0000
Storage to Vessel					
On House (Winter)	1 14110	4.00L-00	4,233.33	<u> </u>	0.0003
Un-Treated (White)	PM10	4.60E-05	4,235.35	3	0.0003
Treated (Red)	PM10	2.30E-05	0.00	3	0.0000
Rail to Storage		150/10[]	(01 1110 1410)	ponts	(short tons
	,,,,,	lbs/ton	(ST This Mo)	points	(short tone
	Туре	E	Handled	of transfer	EIIIISSIOIIS
Emission Source	Emission	Emission Factor	Amount	Number	Emissions
		Controlled	T		

Notes:

June 2009

otee.	То	tal Amount Handled:	82,041.40		0.0061
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Rail Direct to Vessel	51110	0.005.05			
OTHER PRODUCTS ¹	(no storage of oth	er products)			
Un-Treated (White)	PM10	4.60E-05	6,493.20	7	0.0010
Treated (Red)	PM10	2.30E-05	13,462.95	7	0.0011
Rail Direct to Vessel					· · · · · · · · · · · · · · · · · · ·
On Houtou (Winte)	1 10110	4.00E-03	0.00	<u> </u>	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	<u> </u>	0.0000
Treated (Red)	PM10	2.30E-05	28,566.55	5	0.0016
Storage to Vessel					
On-Treated (Winte)	PIVITO	4.60E-05	33,518.70	3	0.0023
Treated (Red) Un-Treated (White)	PM10 PM10	2.30E-05	0.00	3	0.0000
Rail to Storage	D1440	0.005.05			
		lbs/ton	(ST This Mo)	points	(short tons
	Туре	E	Handled	of transfer	
Emission Source	Emission	Emission Factor	Amount	Number	Emissions
	1	Controlled			

Notes:

July 2009

	То	tal Amount Handled:	64,442.62		0.0057
			0.00	•	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	. 7	0.0000
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Rail Direct to Vessel					
	(standgo of our	or producto,			
OTHER PRODUCTS ¹	(no storage of oth	er products)			
	,,	4.00L 00	10,072.00		0.0025
Un-Treated (White)	PM10	4.60E-05	15,572.50	7	0.0000
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Rail Direct to Vessel					
on trouted (winte)	1 14110	4.00L-03	13,408.80	3	0.0018
Un-Treated (White)	PM10	4.60E-05	15,408.60	5	0.0000
Treated (Red)	PM10	2.30E-05	0.00	5	0.0000
Storage to Vessel				· · · · · · · · · · · · · · · · · · ·	
on riodica (vinte)	1 10110	4.00L-03	0,011.51	3	0.0006
Un-Treated (White)	PM10	4.60E-05	8,877.57	3	
Treated (Red)	PM10	2.30E-05	24,583.95	3	0.0008
Rail to Storage		103/(011	(OT THIS IVIO)	points	(short tons
	1,,,,,	lbs/ton	(ST This Mo)	points	/abort tone
	Type	E	Handled	of transfer	Emissions
Emission Source	Emission	Emission Factor	Amount	Number	Emississa
		Controlled			

^{1.} No other products are currently handled, however, other dry bulk products may be handled in the future.

August 2009

	То	tal Amount Handled:	157,935.32		0.0136
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Rail Direct to Vessel					
OTHER PRODUCTS	(no storage of oth	er products)			
Un-Treated (White)	PM10	4.60E-05	25,365.01	7	0.0041
Treated (Red)	PM10	2.30E-05	4,030.39	7	0.0003
Rail Direct to Vessel					
Oil Troutou (Willie)	1 143 10	4.00L-03	31,033.80	3	0.0036
Un-Treated (White)	PM10	4.60E-05	31,633.80	<u>5</u>	0.0028
Treated (Red)	PM10	2.30E-05	48,202.01	5	0.0020
Storage to Vessel	 				
OII-Treated (Wille)	FIVITO	4.60E-05	30,623.03	3	0.0021
Un-Treated (White)	PM10 PM10	2.30E-05	18,081.10	3	0.0006
Rail to Storage Treated (Red)	DM440	0.005.05	40.004.40		
D. 41 (D)		lbs/ton	(ST This Mo)	points	(short tons)
	Туре	E	Handled	of transfer	
Emission Source	Emission	Emission Factor	Amount	Number	Emissions
		Controlled			

^{1.} No other products are currently handled, however, other dry bulk products may be handled in the future.

September 2009

Notos	То	tal Amount Handled:	120,297.84		0.0085
Circled (Fille)	1 10110	4.00L-03	0.00	<u> </u>	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Rail Direct to Vessel	 				,
	(. p. o a a a a			
OTHER PRODUCTS ¹	(no storage of oth	er products)			
			.0,000.40		0.0010
Un-Treated (White)	PM10	4.60E-05	10,908.40	7	0.0024
Treated (Red)	PM10	2.30E-05	30,389.89	7	0.0024
Rail Direct to Vessel					
On-Treated (Winte)	1 101 10	4.00⊑-03	11,596.00	3	0.0013
Un-Treated (White)	PM10	2.30E-05 4.60E-05	26,899.20	5 5	0.0015
Treated (Red)	PM10	2 205 05	00,000,00		
Storage to Vessel					
Un-Treated (White)	PM10	4.60E-05	103.10	3	0.0000
Treated (Red)	PM10	2.30E-05	40,401.24	3	0.0014
Rail to Storage	51116				
		lbs/ton	(ST This Mo)	points	(short tons)
	Туре	E	Handled	of transfer	
Emission Source	Emission	Emission Factor	Amount	Number	Emissions
		Controlled			

Notes:

October 2009

Notes:	To	tal Amount Handled:	138,841.82		0.0112
(**************************************		1.002 00	- 0.00	<u> </u>	0.000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Rail Direct to Vessel	<u> </u>				
		p/			
OTHER PRODUCTS ¹	(no storage of oth	er products)			
			12,011100	•	0.0020
Un-Treated (White)	PM10	4.60E-05	18,044.00	7	0.0017
Treated (Red)	PM10	2.30E-05	21,218.50	7	0.0017
Rail Direct to Vessel					
on moutou (minto)	1 10/10	4.00L-03	20,097.50	3	0.0030
Un-Treated (White)	PM10	4.60E-05	26,097.50	<u> </u>	0.0019 0.0030
Treated (Red)	PM10	2.30E-05	32,238.30	5	0.0040
Storage to Vessel					
On-Treated (Wille)	PIVITO	4.60⊏-05	8,770.02	3	0.0006
Un-Treated (White)	PM10	2.30E-05 4.60E-05	32,473.50	3	0.0011
Rail to Storage Treated (Red)	PM10	0.205.05	20.470.70		
Dellas Otamas		lbs/ton	(ST This Mo)	points	(short tons)
	Туре	. E	Handled	of transfer	
Emission Source	Emission	Emission Factor	Amount	Number	Emissions
		Controlled			

^{1.} No other products are currently handled, however, other dry bulk products may be handled in the future.

November 2009

otos	То	tal Amount Handled:	119,603.74		0.0119
on monton (winte)	1 10/10	7.002-00	0.00		0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Rail Direct to Vessel					
	(inc storage or oth	ici pioddolaj			
OTHER PRODUCTS1	(no storage of oth	ner products)			
					3.0010
Un-Treated (White)	PM10	4.60E-05	29,575.06	7	0.0048
Treated (Red)	PM10	2.30E-05	2,678.60	7	0.0002
Rail Direct to Vessel					
	1	1.002 00	20,707.04	<u> </u>	0.0027
Un-Treated (White)	PM10	4.60E-05	23,437.34	5	0.0007
Treated (Red)	PM10	2.30E-05	13,028.30	5	0.0007
Storage to Vessel					
	1	4.002.00	30,004.44	<u> </u>	0.0035
Un-Treated (White)	PM10	4.60E-05	50,884.44	3	0.0000
Treated (Red)	PM10	2.30E-05	0.00	3	0.0000
Rail to Storage		.55,611	(31 1113 1410)	ponts	(SHOLLIOIS
	1,700	Ibs/ton	(ST This Mo)	points	(short tons
	Type	E	Handled	of transfer	Emissions
Emission Source	Emission	Controlled Emission Factor	Amount	Number	Emissiana

^{1.} No other products are currently handled, however, other dry bulk products may be handled in the future.

December 2009

	То	tal Amount Handled:	328,686.83	· · · · · · · · · · · · · · · · · · ·	0.0287
Un-Treated (White)	PIVITU	4.60E-05	0.00	7	0.0000
Treated (Red)	PM10 PM10	2.30E-05	0.00	<u> </u>	0.0000
Rail Direct to Vessel	D\$440	0.005.05	0.00		
OTHER PRODUCTS ¹	(no storage of oth	er products)			
Un-Treated (White)	PM10	4.60E-05	66,150.70	7	0.0107
Treated (Red)	PM10	2.30E-05	45,546.20	7	0.0037
Rail Direct to Vessel					
	1,11,1		11,020.00		0.0000
Un-Treated (White)	PM10	4.60E-05	47,823.30	5	0.0055
Treated (Red)	PM10	2.30E-05	84,511.40	5	0.0049
Storage to Vessel					
	7 14110	4.001-00	30,730.91	<u> </u>	0.0021
Un-Treated (White)	PM10	4.60E-05	30,736.91	3	0.0019
Treated (Red)	PM10	2.30E-05	53,918.31	3	0.0019
Rail to Storage		109/1011	(31 1113 1110)	points	(short tons)
	Туре	E ibs/ton	Handled (ST This Mo)	of transfer points	(about topo)
Emission Source	Emission	Emission Factor	Amount	Number	Emissions
		Controlled			

Notes:



Kinder Morgan Terminals

January 26, 2009

Ms. Tina Leppaluoto
Department of Environmental Quality
NWR – East Side Office
1550 NW Eastman Parkway
Suite 290
Gresham, Oregon 97030

Re: Air Contaminant Discharge Permit No. 26-3071

Dear Ms. Leppaluoto:

I have enclosed an original and two (2) copies of Kinder Morgan Terminals annual Air Contaminant Discharge Report for our facility located at Terminal 5 in Portland, Oregon.

If you should have any questions regarding the report, please call Brent McMullin (1.800.937.3731) or myself at (503.807.9686).

Regards,

Jack Waller Manager, T-5

Kinder Morgan Terminals

Cc: Air Permit Annual Report File

KINDER MORGAN TERMINALS, INC.

Portland Bulk Terminals, Terminal 5 Air Contaminant Discharge Permit No. 26-3071 Annual Report to Oregon Department of Environmental Quality

Instructions: This form [there are five (5) pages to the form] must be completed and submitted to the DEQ no later than January 15th of each year for operations during the previous calendar year. Mail the original and two copies to: Department of Environmental Quality, 2020 SW 4th Avenue, Suite No. 400, Portland, OR 97201-5884.

Mail a copy of the report to Corporate Environmental Affairs in Sorrento.

This report is for the calendar year January 1, 2008 to December 31, 2008.

A. In the space below, or on a separate sheet of paper attached to this form, list the amounts (tons/year) and types of commodities shipped and received during the report year.

Refer to attached sheets

Page 2 PBT-5 Annual Air Report

B. Summarize below (or attach separate sheets) all fugitive dust complaints received by PBT-5 from any public citizen during the report year.

None

Page 3 PBT-5 Annual Air Report

C. Attach to this sheet an Upset Log sheet for all excess emissions that occurred during the report year.

If no excess emissions occurred during the report year, check the statement below and sign your name where indicated and enter the date and your title.

THIS IS TO CERTIFY THAT NO EXCESS EMISSIONS OCCURRED AT THIS FACILITY DURING THE REPORT YEAR.

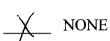
Signed Will

_____ Date January 26, 2009

Title Manager, T-5

D. In the space below, explain any permanent changes made in terminal processes and/or products handled which would affect air contaminant emissions and indicate when the changes were made.

If no such changes were made in the report year, check here:



Page 5 PBT-5 Annual Air Report

E. List on this page (or attach a separate sheet showing) all maintenance performed on air pollution equipment during the report year.

Refer to attached documentation

PORTLAND BULK TERMINALS DUST COLLECTOR MAINTENANCE MONTHLY

ENVIRONMENTAL COMPLIANCE REPORT

DOCUMENT ALL REPAIRS AS REQUIRED IN THE AIR CONTAMINANT DISCHARGE PERMIT EFFECTIVE 7/11/02. Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

January		repairs pertaining to Dust Collectors, Cy		REPAIR ACTIVITY	REPAIR ACTIVITY
DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A	 	 	_		
DC-1B					
DC-2	Destand stan wake	Replaced fan bearings			
DC-3	Replaced rotary valve	Replaced fait bearings	+		
DC-4 DC-5		-	 		
DC-6					
DC7-A					
DC7-B	<u> </u>			<u> </u>	
ebruary	Instruction: All	repairs pertaining to Dust Collectors, Cy	clones and their components and	will be logged on this sheet.	
UST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A		1			
DC-1B					
DC-2					
DC-3	Replaced rotary valve	Replaced fan bearings			<u> </u>
DC-4					
DC-5	Replaced Cyclone RV valve	T -			
DC-6					
DC7-A					
DC7-B					
					
larch		repairs pertaining to Dust Collectors, Cy	clones and their components and	will be logged on this sheet.	
UST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A					
DC-1B		Unplug			
DC-2	Replaced rotary valve	Rebuild blower base	Unplug Unplug Unplug	Unplug	
DC-3	Unplug				
DC-4	Replaced Cyclone RV valve	Unplug Unplug			
DC-5					
DC-6					
DC7-A	Replaced bags				
DC7-B	Replaced spout hose	Unplug Unplug			
			-		
pril	Instruction: All	repairs pertaining to Dust Collectors, Cy			
UST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A				Clean excess cargo build-up fron	
DC-1B	Replaced rotary valve	Replaced Cyclone RV valve	Unplug Unplug	Clean excess cargo build-up fron	
DC-2	Replaced rotary valve			Clean excess cargo build-up fron	
DC-3	Unplug Unplug Unplug Unplug			Clean excess cargo build-up fron	
DC-4	Unplug Unplug Unplug Unplug			Clean excess cargo build-up fron	n rotary valve
DC-5	Unplug Unplug Unplug			Clean excess cargo build-up from	
DC-6				Clean excess cargo build-up fron	
DC7-A				Clean excess cargo build-up fron	
DC7-B	Unplug Unplug Unplug	T	<u> </u>	Clean excess cargo build-up fron	rotary valve
_	P - 4 41 41		-lance and their companies and	udil he leaged on this shoot	
lay		repairs pertaining to Dust Collectors, Cy-	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
UST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	KEFAIK AUTIVITY	IKEPAIK ACTIVITY
DC-1A	Unplug	 			
DC-1B	Unplug Unplug	Basines duet acts motor	Inetall air cannon	Replace return line at RV10	Install air crompressor
DC-2	Unplug Unplug Unplug	Replace dust gate motor	Install air cannon	Tropicoo rotorrimio di INV 10	
DC-3	Unplug Unplug Unplug Unplug	Instail new air cannon	Install new return line	Install air compressor	Duct work cleaned out
DC-4	Unplug Unplug		III STAIL HOW TOTALL! HINE	motell all Compression	Date work Goderen out
DC-5	Unplug Unplug	Replace air cannon solenoid	· · · · · · · · · · · · · · · · · · ·		+
DC-6	Unplug	Penlace PO Piguer			
DC7-A DC7-B	Unplug	Replace PD Blower	 		
	Torribing	<u> </u>			
	Instruction: All	renairs pertaining to Dust Collectors Cv.	clones and their components, and	will be loaged on this sheet.	
une		repairs pertaining to Dust Collectors, Cy	clones and their components and	will be logged on this sheet. REPAIR ACTIVITY	REPAIR ACTIVITY
une UST COLLECTOR	REPAIR ACTIVITY	repairs pertaining to Dust Collectors, Cy REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
une UST COLLECTOR DC-1A	REPAIR ACTIVITY Install air compressor plumbing	REPAIR ACTIVITY	REPAIR ACTIVITY Install air cannon	will be logged on this sheet. REPAIR ACTIVITY install air compressor install air compressor	REPAIR ACTIVITY
UST COLLECTOR DC-1A DC-1B	REPAIR ACTIVITY Install air compressor plumbing Install air compressor plumbing	REPAIR ACTIVITY Replace rotary valve at cyclone	REPAIR ACTIVITY Install air cannon Install air cannon	REPAIR ACTIVITY install air compressor install air compressor	REPAIR ACTIVITY
UST COLLECTOR DC-1A DC-1B DC-2	REPAIR ACTIVITY Install air compressor plumbing Install air compressor plumbing Unplug Unplug Unplug Unplug Unplug	REPAIR ACTIVITY Replace rotary valve at cyclone Unplug	Install air cannon Install air cannon Install air cannon Replaced bags 6-13-08 (annual PM	REPAIR ACTIVITY install air compressor install air compressor I)	REPAIR ACTIVITY
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UST COLLECTOR DC-1A DC-1B DC-2 DC-3 DC-4 DC-5 DC-6 DC7-A DC7-B UST COLLECTOR DC-1A DC-1B DC-2 DC-3 DC-1A DC-1B DC-2 DC-3 DC-4	REPAIR ACTIVITY Install air compressor plumbing Install air compressor plumbing Unpiug Unplug Unpiug Unpiug Unpiug Unplug Unplug Unplug Unpiug Unpiug Unplug Unplug Unplug Unpiug Unpiug Unplug Unpiug Unpiug	REPAIR ACTIVITY Replace rotary valve at cyclone Unplug Replaced bags 6-5-08 (annual PM) Replaced bags 6-7-08 (annual PM) Replaced bags 6-6-08 (annual PM) Replaced bags 6-6-08 (annual PM) Replaced bags 6-6-08 (annual PM) Unplug Unplug Unplug repairs pertaining to Dust Collectors, Cyclectors REPAIR ACTIVITY Adjust V-Belt tension	REPAIR ACTIVITY Install air cannon Install air cannon Replaced bags 6-13-08 (annual PM Remove slide gates to clean Replace air cannon valve, replumb Clean dust ducts cyclone line to ba Replaced bags 6-5-08 (annual PM) Clones and their components and REPAIR ACTIVITY Balance Dust collector	REPAIR ACTIVITY install air compressor install air compressor) Re-install slide gates ghouse will be logged on this sheet.	Install air cannon
UST COLLECTOR DC-1A DC-1B DC-2 DC-3 DC-4 DC-6 DC-6 DC7-A DC7-B UST COLLECTOR DC-1B DC-1B DC-1B DC-1B DC-1B DC-1B DC-1B DC-1B DC-1B DC-2 DC-3 DC-4 DC-5	REPAIR ACTIVITY Install air compressor plumbing Install air compressor plumbing Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Instruction: All REPAIR ACTIVITY Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug	REPAIR ACTIVITY Replace rotary valve at cyclone Unplug Replaced bags 6-5-08 (annual PM) Replaced bags 6-7-08 (annual PM) Replaced bags 6-6-08 (annual PM) Replaced bags 6-6-08 (annual PM) Replaced bags 6-6-08 (annual PM) Unplug [Unplug Unplug Unplug Unplug Unplug Unplug Unplug Unplug Unplug REPAIR ACTIVITY Adjust V-Belt tension Adjust V-Belt tension	REPAIR ACTIVITY Install air cannon Install air cannon Replaced bags 6-13-08 (annual PM Remove slide gates to clean Replace air cannon valve; replumb Clean dust ducts cyclone line to ba Replaced bags 6-5-08 (annual PM) clones and their components and replaced bags 6-5-08 (annual PM) REPAIR ACTIVITY Balance Dust collector	REPAIR ACTIVITY install air compressor install air compressor) Re-install slide gates ghouse will be logged on this sheet.	Install air cannon
DC-1A DC-1B DC-2 DC-3 DC-4 DC-6 DC-6 DC-7-A DC-7-B UST COLLECTOR DC-1B DC-1B DC-1B DC-1B DC-1B DC-1B DC-2 DC-3 DC-4 DC-5 DC-6 DC-6 DC-1A DC-1B DC-1B DC-1B DC-1B DC-2 DC-3 DC-4 DC-5 DC-6	REPAIR ACTIVITY Install air compressor plumbing Unpiug Unplug Unpiug Unpiug Unplug Unplug Unpiug Unpiug Unplug Unplug Unpiug Unpiug Unplug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Instruction: All REPAIR ACTIVITY Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug	REPAIR ACTIVITY Replace rotary valve at cyclone Unplug Replaced bags 6-5-08 (annual PM) Replaced bags 6-6-08 (annual PM) Unplug Unplug Unplug Unplug Unplug Unplug Unplug Unplug REPAIR ACTIVITY Adjust V-Belt tension Adjust V-Belt tension	REPAIR ACTIVITY Install air cannon Install air cannon Replaced bags 6-13-08 (annual PM Remove slide gates to clean Replace air cannon valve; replumb Clean dust ducts cyclone line to bar Replaced bags 6-5-08 (annual PM) clones and their components and replaced bags 6-5-08 (annual PM) clones and their components and replaced bags 6-5-08 (annual PM) clones and their components and replaced base collector Balance Dust collector	REPAIR ACTIVITY install air compressor install air compressor) Re-install slide gates ghouse will be logged on this sheet.	Install air cannon
UST COLLECTOR DC-1A DC-1B DC-2 DC-3 DC-4 DC-6 DC-6 DC7-A DC7-B Jly UST COLLECTOR DC-1A DC-1B DC-1A DC-1B DC-2 DC-3 DC-4 DC-1A DC-1B DC-2 DC-3 DC-4 DC-5	REPAIR ACTIVITY Install air compressor plumbing Install air compressor plumbing Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Instruction: All REPAIR ACTIVITY Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug Unpiug	REPAIR ACTIVITY Replace rotary valve at cyclone Unplug Replaced bags 6-5-08 (annual PM) Replaced bags 6-7-08 (annual PM) Replaced bags 6-6-08 (annual PM) Replaced bags 6-6-08 (annual PM) Replaced bags 6-6-08 (annual PM) Unplug [Unplug Unplug Unplug Unplug Unplug Unplug Unplug Unplug Unplug REPAIR ACTIVITY Adjust V-Belt tension Adjust V-Belt tension	REPAIR ACTIVITY Install air cannon Install air cannon Replaced bags 6-13-08 (annual PM Remove slide gates to clean Replace air cannon valve; replumb Clean dust ducts cyclone line to ba Replaced bags 6-5-08 (annual PM) clones and their components and replaced bags 6-5-08 (annual PM) REPAIR ACTIVITY Balance Dust collector	REPAIR ACTIVITY install air compressor install air compressor) Re-install slide gates ghouse will be logged on this sheet.	Install air cannon

August	Instruction: All	repairs pertaining to Dust Collectors, Cy	ciones and their components are	Will be logged on this shock	IDEDAID ACTUATY
DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A	Install overhead cover for compres	sor	Replace rotary valve G/B		
DC-1B	install overhead cover for compres	sor	Rebuild rotary valve	Rebuild and install air cannon	
DC-2	install overhead cover for compres	sor			
DC-3		<u></u>			
DC-4	install overhead cover for compres	sor		<u> </u>	
DC-5	Replaced suterbuilt blower	<u> </u>		<u> </u>	
DC-6	Install overhead cover for compres	sor			
DC7-A					
DC7-B		<u> </u>			
			reference and their components, and	d will be logged on this sheet	
September		repairs pertaining to Dust Collectors, Cy	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPARTACIONI
DC-1A		<u></u>			+
DC-1B					
DC-2					+
DC-3		<u> </u>			
DC-4	Unplug Unplug Unplug				
DC-6					
DC-6					
DC7-A	Unplug Unplug Unplug		lingly upanlyaged collector		
DC7-B	Plugged 9/13, down for 3 hours, los	ading continued, management notified; rout	tinely ungplugged collector		
				d will be looged on this sheet	
October		repairs pertaining to Dust Collectors, Cy	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	Repair air cannon leak	Install air line lubricator	
DC-1A	Replace bags at Baghouse 10-15 (annuai PM)		material an ime logiticator	
DC-1B	Replace bags at Baghouse 10-15 (annuai PM)	Install air line lubricator	 	
DC-2	Install air line lubricator			 	
DC-3					
DC-4	Install air line lubricator	<u></u>		<u> </u>	
DC-5	Replaced rotary valve				
DC-6	Install air line lubricator				_
DC7-A					
DC7-B		<u> </u>			
		repairs pertaining to Dust Collectors, Cy	release and their companions are	d will be loaged on this sheet	
November		REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DUST COLLECTOR	REPAIR ACTIVITY Replaced inboard and outboard far		NEI AN AGUIT		
DC-1A	Replaced inboard and outboard far		+	<u> </u>	
DC-1B	Replaced inboard and outboard far		 		
DC-2	Replaced sipoard and oduboard rai	Dealings	 		
DC-3 DC-4			<u> </u>		
	A TOTAL CONTRACTOR AND A STATE OF THE STATE				
DC-5		Poplace hadhouse door seel	1		
	Install air line lubricator	Replace baghouse door seal			
DC-6	Replaced cyclone rotary valve; reb				
DC7-A					
DC7-A DC7-B	Replaced cyclone rotary valve; reb	uild and keep in warehouse	ciones and their components an	d will be logged on this sheet.	
DC7-A DC7-B	Replaced cyclone rotary valve; reb	uild and keep in warehouse	clones and their components and	d will be logged on this sheet.	REPAIR ACTIVITY
DC7-A DC7-B December DUST COLLECTOR	Replaced cyclone rotary valve; reb	uild and keep in warehouse	ciones and their components and REPAIR ACTIVITY	d will be logged on this sheet. REPAIR ACTIVITY	REPAIR ACTIVITY
DC7-A DC7-B December DUST COLLECTOR DC-1A	Replaced cyclone rotary valve; reb	uild and keep in warehouse	rciones and their components and REPAIR ACTIVITY	d will be logged on this sheet. REPAIR ACTIVITY	REPAIR ACTIVITY
DC7-A DC7-B December DUST COLLECTOR DC-1A DC-1B	Replaced cyclone rotary valve; reb	uild and keep in warehouse	rciones and their components and REPAIR ACTIVITY	d will be logged on this sheet. REPAIR ACTIVITY	REPAIR ACTIVITY
DC7-A DC7-B December DUST COLLECTOR DC-1A DC-1B DC-2	Replaced cyclone rotary valve; reb	uild and keep in warehouse	rciones and their components and REPAIR ACTIVITY	d will be logged on this sheet. REPAIR ACTIVITY	REPAIR ACTIVITY
DC7-A DC7-B December DUST COLLECTOR DC-1A DC-1B DC-2 DC-3	Replaced cyclone rotary valve; reb	repairs pertaining to Dust Collectors, Cy	REPAIR ACTIVITY	REPAIR ACTIVITY	
DC7-A DC7-B December DUST COLLECTOR DC-1A DC-1B DC-2 DC-3 DC-4	Replaced cyclone rotary valve; reb	uild and keep in warehouse	REPAIR ACTIVITY	REPAIR ACTIVITY	
DC7-A DC7-B December DUST COLLECTOR DC-1A DC-1B DC-2 DC-3 DC-4 DC-5	Replaced cyclone rotary valve; reb	repairs pertaining to Dust Collectors, Cy	REPAIR ACTIVITY	REPAIR ACTIVITY	
DC7-A DC7-B December DUST COLLECTOR DC-1A DC-1B DC-2 DC-3 DC-4 DC-6 DC-6	Replaced cyclone rotary valve; reb	repairs pertaining to Dust Collectors, Cy	REPAIR ACTIVITY	REPAIR ACTIVITY	
DC7-A DC7-B December DUST COLLECTOR DC-1A DC-1B DC-2 DC-3 DC-4 DC-5 DC-6 DC-6 DC7-A	Replaced cyclone rotary valve; reb	repairs pertaining to Dust Collectors, Cy	REPAIR ACTIVITY	REPAIR ACTIVITY	
DC7-A DC7-B December DUST COLLECTOR DC-1A DC-1B DC-2 DC-3 DC-4 DC-6 DC-6	Replaced cyclone rotary valve; reb	repairs pertaining to Dust Collectors, Cy	REPAIR ACTIVITY	REPAIR ACTIVITY	
DC7-A DC7-B December DUST COLLECTOR DC-1A DC-1B DC-2 DC-3 DC-4 DC-5 DC-6 DC7-A DC7-B	Replaced cyclone rotary valve; rebi	repairs pertaining to Dust Collectors, Cy REPAIR ACTIVITY iffs troubleshoot faulty high pressure alarm on	REPAIR ACTIVITY baghouse; no excess emissions. Repa	REPAIR ACTIVITY	
DC7-A DC7-B December DUST COLLECTOR DC-1A DC-1B DC-2 DC-3 DC-4 DC-5 DC-6 DC-6 DC7-A DC7-B REPAIR LOG	Instruction: All Irepairs pertaining	repairs pertaining to Dust Collectors, Cy REPAIR ACTIVITY iffs troubleshoot faulty high pressure alarm on	baghouse; no excess emissions. Repair components and will be logged	REPAIR ACTIVITY	
DC7-A DC7-B December DUST COLLECTOR DC-1A DC-1B DC-2 DC-3 DC-4 DC-5 DC-6 DC7-A DC7-B REPAIR LOG DUST COLLECTOR	Replaced cyclone rotary valve; rebi	repairs pertaining to Dust Collectors, Cy REPAIR ACTIVITY iffs troubleshoot faulty high pressure alarm on	REPAIR ACTIVITY baghouse; no excess emissions. Repa	REPAIR ACTIVITY irred filter at high pressure tubing for pl on this sheet.	notohelic sensor
DC7-A DC7-B December DUST COLLECTOR DC-1A DC-1B DC-2 DC-3 DC-4 DC-5 DC-6 DC7-A DC7-B REPAIR LOG DUST COLLECTOR	Instruction: All Irepairs pertaining	repairs pertaining to Dust Collectors, Cy REPAIR ACTIVITY iffs troubleshoot faulty high pressure alarm on	baghouse; no excess emissions. Repair components and will be logged	REPAIR ACTIVITY irred filter at high pressure tubing for pl on this sheet.	notohelic sensor
DC7-A DC7-B December DUST COLLECTOR DC-1A DC-1B DC-2 DC-3 DC-4 DC-5 DC-6 DC7-A DC7-B REPAIR LOG DUST COLLECTOR DC-1A DC-1B	Instruction: All Irepairs pertaining	repairs pertaining to Dust Collectors, Cy REPAIR ACTIVITY iffs troubleshoot faulty high pressure alarm on	baghouse; no excess emissions. Repair	REPAIR ACTIVITY irred filter at high pressure tubing for pl on this sheet.	notohelic sensor
DC7-A DC7-B December DUST COLLECTOR DC-1A DC-1B DC-2 DC-3 DC-4 DC-5 DC-6 DC7-A DC7-B REPAIR LOG DUST COLLECTOR DC-1B DC-1B DC-1B DC-1B DC-1B DC-1B DC-1B DC-1B	Instruction: All Pepairs pertaining REPAIR ACTIVITY	repairs pertaining to Dust Collectors, Cy REPAIR ACTIVITY iffs troubleshoot faulty high pressure alarm on	baghouse; no excess emissions. Repair	REPAIR ACTIVITY irred filter at high pressure tubing for pl on this sheet.	notohelic sensor
DC7-A DC7-B December DUST COLLECTOR DC-1A DC-1B DC-2 DC-3 DC-4 DC-5 DC-6 DC7-A DC7-B REPAIR LOG DUST COLLECTOR DC-1A DC-1B DC-1B DC-2 DC-3	Instruction: All Irepairs pertaining	repairs pertaining to Dust Collectors, Cy REPAIR ACTIVITY iffs troubleshoot faulty high pressure alarm on	baghouse; no excess emissions. Repair	REPAIR ACTIVITY irred filter at high pressure tubing for pl on this sheet.	notohelic sensor
DC7-A DC7-B December DUST COLLECTOR DC-1A DC-1B DC-2 DC-3 DC-4 DC-5 DC-6 DC7-B REPAIR LOG DUST COLLECTOR DC-1B DC-1B DC-1B DC-1B DC-1A DC-1B DC-1B DC-1A DC-1B DC-1B DC-1A DC-1B DC-2 DC-3 DC-3	Instruction: All REPAIR ACTIVITY 12/5 2nd shift & 12/7 1st, 2nd, 3rd shift instruction: All repairs pertaining REPAIR ACTIVITY Replaced Rotary Valve	repairs pertaining to Dust Collectors, Cy REPAIR ACTIVITY iffs troubleshoot faulty high pressure alarm on	baghouse; no excess emissions. Repair	REPAIR ACTIVITY irred filter at high pressure tubing for pl on this sheet.	notohelic sensor
DC7-A DC7-B December DUST COLLECTOR DC-1A DC-1B DC-2 DC-3 DC-4 DC-5 DC-6 DC7-A DC7-B REPAIR LOG DUST COLLECTOR DC-1B DC-1B DC-1C-1C DC-1C	Instruction: All REPAIR ACTIVITY 12/5 2nd shift & 12/7 1st, 2nd, 3rd shift	repairs pertaining to Dust Collectors, Cy REPAIR ACTIVITY iffs troubleshoot faulty high pressure alarm on	baghouse; no excess emissions. Repair	REPAIR ACTIVITY irred filter at high pressure tubing for pl on this sheet.	notohelic sensor
DC7-A DC7-B December DUST COLLECTOR DC-1A DC-1B DC-2 DC-3 DC-4 DC-5 DC-6 DC7-A DC7-B REPAIR LOG DUST COLLECTOR DC-1B DC-1B DC-1B DC-1B DC-1A DC-1B DC-1B DC-2 DC-3 DC-3 DC-4 DC-5 DC-5 DC-6 DC-1A DC-1B DC-1B DC-1B DC-1B DC-1B DC-1B DC-1B DC-2 DC-3 DC-4 DC-5 DC-6 DC-6	Instruction: All REPAIR ACTIVITY 12/5 2nd shift & 12/7 1st, 2nd, 3rd shift instruction: All repairs pertaining REPAIR ACTIVITY Replaced Rotary Valve	repairs pertaining to Dust Collectors, Cy REPAIR ACTIVITY iffs troubleshoot faulty high pressure alarm on	baghouse; no excess emissions. Repair	REPAIR ACTIVITY irred filter at high pressure tubing for pl on this sheet.	notohelic sensor
DC7-A DC7-B December DUST COLLECTOR DC-1A DC-1B DC-2 DC-3 DC-4 DC-5 DC-6 DC7-A DC7-B REPAIR LOG DUST COLLECTOR DC-1B DC-1B DC-1C-1C DC-1C	Instruction: All REPAIR ACTIVITY 12/5 2nd shift & 12/7 1st, 2nd, 3rd shift	repairs pertaining to Dust Collectors, Cy REPAIR ACTIVITY iffs troubleshoot faulty high pressure alarm on	baghouse; no excess emissions. Repair	REPAIR ACTIVITY irred filter at high pressure tubing for pl on this sheet.	notohelic sensor

		TOT/	VI CARGO	HANDLED 2008	}	
BAIL	TO SHIP		STORAGE		TOTAL TONS	TOTAL TONS
# Cars	Tons Loaded		Tons Loaded	Tons Loaded	SHIPPED	HANDLED
14,740	1,510,596.744	13,946	1,429,322.282	1,274,578.956	2,785,175.700	4,214,497.982
ADJUSTME			<u></u>		0	
	ARGO HANDLE	D			2,785,175.700	
				TOTALS	TOTAL TONO	TOTAL TONS
	TO SHIP		STORAGE		TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars	Tons Loaded	# Cars 1.615	Tons Loaded 165,489.567	Tons Loaded 177,050.163	254,641,000	420,130.567
757	77,590.837	1,613	100,409.507	177,000.100	20-1,0-11,000	120,100.00.
			FEBRUAR	Y TOTALS		
RAIL	TO SHIP	RAIL TO	STORAGE		TOTAL TONS	TOTAL TONS
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded	SHIPPED	HANDLED
1,353	138,659.301	1,384	141,842.133	159,535.199	298,194.500	440,036.633
				TOTALS		
	TO SHIP		STORAGE	STORAGE TO SHIP	TOTAL TONS SHIPPED	TOTAL TONS
# Cars	Tons Loaded		Tons Loaded	Tons Loaded 143,592.272	333,275.460	479,683.828
1,851	189,683.188	1428	146,408.368	143,382.272	333,213.400	71 0,000.020
l			ADRII 1	TOTALS		
PAII	TO SHIP	RAII TO	STORAGE	STORAGE TO SHIP	TOTAL TONS	TOTAL TONS
# Cars	Tons Loaded		Tons Loaded	Tons Loaded	SHIPPED	HANDLED
1552	159,040.086	1707	174,976.449	152,671.174	311,711.260	486,687.709
		-		<u> </u>		
				OTALS		
RAIL	TO SHIP		STORAGE		TOTAL TONS	TOTAL TONS
# Cars	Tons Loaded		Tons Loaded		SHIPPED	HANDLED
1,688	173,005.499	1527	156,497.438	128,169.301	301,174.800	457,672.238
Į.	-			OTAL C		
	TO 01/10	DAU T	STORAGE	OTALS STORAGE TO SHIP	TOTAL TONS	TOTAL TONS
	TO SHIP Tons Loaded		Tons Loaded	Tons Loaded	SHIPPED	HANDLED
# Cars 1,474	151,080.451	911	93,328.188	79,766.849	230,847,300	324,175,488
1,7/7	131,000.401	<u> </u>	1 00,020.700	1		
			JULY T	TOTALS		
RAIL	TO SHIP	RAIL TO	STORAGE	STORAGE TO SHIP	TOTAL TONS	TOTAL TONS
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded	SHIPPED	HANDLED
865	88,678.690	481	49,315.662	38,615.510	127,294.200	176,609.862
	TO 01115	DAU T		TOTALS STORAGE TO SHIP	TOTAL TONS	TOTAL TONS
	TO SHIP Tons Loaded		STORAGE Tons Loaded		SHIPPED	HANDLED
# Cars 1491	152,789.458	# Cars 1089	111,593.742	90,138.642	242,928.100	354,521.842
1451	102,100,400	1000	111,000.172		,	
			SEPTEMB	ER TOTALS		
RAIL	TO SHIP		STORAGE	STORAGE TO SHIP	TOTAL TONS	TOTAL TONS
# Cars	Tons Loaded		Tons Loaded		SHIPPED	HANDLED
1,377	141,122.721	1373	140,760.482	112,134.259	253,256.980	394,017.462
1			00-00-	D TOTAL C		
	TO 01"5	DAD =		R TOTALS STORAGE TO SHIP	TOTAL TONS	TOTAL TONS
	TO SHIP Tons Loaded		STORAGE Tons Loaded		SHIPPED	HANDLED
# Cars 889	91,077.019	# Cars	92,096.755	98,126.081	189,203.100	281,299.855
003	31,011.019	L 099	02,000.700	1 00,120.001		,,
!			NOVEMBE	R TOTALS		
RAIL	TO SHIP	RAIL TO	STORAGE		TOTAL TONS	TOTAL TONS
# Cars	Tons Loaded		Tons Loaded		SHIPPED	HANDLED
644	65,996.727	656	67,212.233	42,498.073	108,494.800	175,707.033
l				R TOTALS		
	TO SHIP		O STORAGE	·	TOTAL TONS	TOTAL TONS
# Cars	Tons Loaded		Tons Loaded		SHIPPED	HANDLED
799	81,872.767	876	89,801.265	52,281.433	134,154.200	223,955.465

2008 ANNUAL RAIL AND STORAGE CARGO ACTIVITY ENVIRONMENTAL REPORT

	Bay	#1	Bay	#2	D.,	<i>r</i> #3		.44	5	"				
	 						Bay	V#4	Bay	775	Ba	y#6	Tot	als
	ln	Out	in	Out	In	Out	In	Out	Jn	Out	In	Out	in	Out
January	11,512.723	8,795.200	11,493.665	1,152.000	18,076.130	32,036.400	5,645.690	6,402.728	54,436.294	53,551,898	64,325,065	75,111.937	165,489,567	177,050,163
February	0.000	12,163.650	0.000	7,246.800	19,176.438	18,793.328	8,666,741	2,027.600	25,533,438	15,006,000	88,465,816	104.297.821	141,842.433	159,535,199
March	14,649.105	10,482.220	7,851.730	5,581.600	9,295.899	14,333,820	10,523,513		44,327,872	7,421,200	59.760.249	93.896.000	146,408.368	143,592,272
April	8,367.463	12,786.060	5,049.415	7,301.600	20,757,085	20,682,400	11,551,276		27,298,220	0.000	101,952,990	93,920.631	174,976,449	
May	10,019.062	0.000	15,074.074	6,499,600	9,819,232	10,967,200	11,242,634	2,010.800	21,293,503	47.381.073	89.048.933	61.310.628	156.497.438	152,671.174
June	3,815.755	3,920.070	9,600.712	7,906,000	6,611.252		5,360.533		720.995	0.000	67,218.941	60,202,170		128,169.301
July	5,148.252	9,625.593	7,328.739	4,004,000		2,433,058	3,610,412		17,228,174	9.778.527	3,912,824	7.094.400	93,328.188 49.315.662	79,766.849
August	7,536.708	8,519.200	7,531.364	4,497,600	15,659.519		8,451,741	12,703,916	12,685,528	0.000	59,728.882	51.753.700		38,615.510
September	17,033.598	16,113,300	7,746.158	7,914,800	16,692,156	3,565,362	13,627,379	13,588,439	21,246,599	18.052.000	64.414.594	52,900.358	111,593.742	90,158.642
October	14,522.790	11,032,254	4,745,008	8,525,997	19,550,939	26,053,971	14,970,271	17,330,216	18,585,719	0.000	19.692.028		140,760.484	112,134.259
November	5,887.991	9.010.400		4,496,000	10,760,888	2,930,050	11,464,062		10,096,944	16,404,000		35,183.643	92,066.755	98,126.081
December	10,114.434	5,802.666	5,245,543	7,249,200	42,724,486	32.838.741	8,373.829				18,364.697	5,640.823	67,212.233	42,498.073
	11,11,11,11,11,11,11,11,11,11,11,11,11,	-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	5,210.010	.,270.200	72,127.700	02,000.741	0,373.029	0,012.400	21,696.951	0.000	1,646.022	378.426	89,801.265	52,281.433
TOTALS	108,607,881	108.250.613	92.304.059	72,375,197	201,211,285	181,842,956	113.488.081	400.044.055	075 450 007	107.501.000				
	1 .55,301.001	.55,200.0101	02,004.0001	12,010.191	201,211.203	101,042.930	113,488.081	102,844.955	275,150.237	167,594.698	638,531.041	641,690.537	1,429,292.584	1,274,598.956

KINDER MORGAN BULK TERMINAL 5 ROLLING 12-MONTH EMISSIONS

MONTH/YEAR	COMBINED TOTAL - SHORT TONS HANDLED	PM ₁₀ EMISSIONS - SHORT TONS PER MONTH
January, 2008	420,130.57	0.0434
February, 2008	440,036.63	0.0504
March, 2008	479,683.83	0.0571
April, 2008	486,687.71	0.0522
May, 2008	457,672.24	0.0311
June, 2008	324,175.49	0.0261
July, 2008	176,609.85	0.0160
August, 2008	354,521.84	0.0287
September, 2008	394,017.46	0.0291
October, 2008	281,299.86	0.0235
November, 2008	175,707.03	0.0147
December, 2008	223,955.47	0.0303
12 Month Totals:	4,214,497.97	0.4586
	Permit Limit:	14.0000

November 2008

		Controlled			
Emission Source	Emission	Emission Factor	Amount	Number	Emissions
	Type	E	Handled	of transfer	
· · · · · · · · · · · · · · · · · · ·		lbs/ton	(ST This Mo)	points	(short tons)
POTASH				<u></u>	
Rail to Storage	PM10	4.60E-05	91,129.78	3	0.0062
	1 11110	4.002 00	31,723.70		0.0002
Storage to Vessel	PM10	4.60E-05	101,910.30	5	0.0117
Rail Direct to Vessel	PM10	4.60E-05	131,103.50	7	0.0211
OTHER PRODUCTS ¹					
Rail Direct to Vessel	PM10	4.60E-05	0.00	7	0.0000
no storage of other products)					3.3000
	Tot	tal Amount Handled:	324,143.58		0.0390

^{1.} No other products are currently handled, however, other dry bulk products may be handled in the future.

December 2007

(no storage of other products)		1.002.00	5,00		0.5000
Rail Direct to Vessel	PM10	4.60E-05	0,00	7	0.0000
OTHER PRODUCTS ¹					
Rail Direct to Vessel	1 10110	4.00E-03	33,311.93		0.0086
Rail Direct to Vessel	PM10	4.60E-05	53,511.95	7	0.0086
Storage to Vessel	PM10	4.60E-05	122,236.71	5	0.0140
Rail to Storage	PM10	4.60E-05	112,152.70	3	0.0077
POTASH					
	Туре	E lbs/ton	Handled (ST This Mo)	of transfer points	(short tons)
Emission Source	Emission	Controlled Emission Factor	Amount	Number	Emissions

Notes:

January 2008

		Controlled			
Emission Source	Emission	Emission Factor	Amount	Number	Emissions
	Type	Е	Handled	of transfer	211110010110
		lbs/ton	(ST This Mo)	points	(short tons)
POTASH					
Rail to Storage	PM10	4.60E-05	165,489.57	3	0.0114
Storage to Vessel	PM10	4.60E-05	177,050.16	5	0.0200
Rail Direct to Vessel	PM10	4.60E-05	77,590.84	7	0.0120
					
OTHER PRODUCTS ¹					
Rail Direct to Vessel	PM10	4.60E-05	0.00	7	0.0000
o storage of other products)					
	Tot	l tal Amount Handled:	420,130.567		0.0434

Notes:

February 2008

	Tot	tal Amount Handled:	440,036.63	·	0.0504
-s statege s. sandi producto)				· · · · · · · · · · · · · · · · · · ·	
Rail Direct to Vessel no storage of other products)	PM10	4.60E-05	0.00	7	0.0000
Poil Direct to Vescel	DM40	4.005.05			
OTHER PRODUCTS					
Rail Direct to Vessel	PM10	4.60E-05	138,659.30	7	0.0223
Storage to Vessel	PM10	4.60E-05	159,535.20	5	0.0183
Storage to Vessel	DM10	4.005.05	450 505 00		
Rail to Storage	PM10	4.60E-05	141,842.13	3	0.0098
POTASH					
					,
	Type	lbs/ton	(ST This Mo)	of transfer points	(short tons)
Emission Source	Emission Type	Emission Factor E	Amount Handled	Number	Emissions
		Controlled			

Notes:

March 2008

		Controlled			
Emission Source	Emission	Emission Factor	Amount	Number	Emissions
	Туре	E	Handled	of transfer	
		lbs/ton	(ST This Mo)	points	(short tons)
POTASH					
Rail to Storage	PM10	4.60E-05	146,408.37	3	0.0101
Storage to Vessel	PM10	4.60E-05	143,592.27	5	0.0165
Rail Direct to Vessel	PM10	4.60E-05	·189,683.19	7	0.0305
OTHER PRODUCTS ¹					
Rail Direct to Vessel	PM10	4.60E-05	0.00	7	0.0000
o storage of other products)				· · · · · · · · · · · · · · · · · · ·	
	To	l tal Amount Handled:	479,683.83	-	0.0571

Notes:

April 2008

Emission Saures	Funda ada a	Controlled			<u> </u>
Emission Source	Emission	Emission Factor	Amount	Number	Emissions
	Туре	E	Handled	of transfer	•
	ļ	lbs/ton	(ST This Mo)	points	(short tons)
POTASH					
Dail to Stavens	DM40	4.005.05	474.070.45		
Rail to Storage	PM10	4.60E-05	174,976.45	3	0.0121
Storage to Vessel	PM10	4.60E-05	152,671.17	5	0.0176
Rail Direct to Vessel	PM10	4.60E-05	159,040.09	7	0.0226
OTHER PRODUCTS ¹					
Rail Direct to Vessel	PM10	4.60E-05	0.00	7	0.0000
no storage of other products)					
	To	tal Amount Handled:	486,687.71		0.0522

Notes:

MAY 2008

		Controlled			
Emission Source	Emission	Emission Factor	Amount	Number	Emissions
	Туре	E	Handled	of transfer	
		lbs/ton_	(ST This Mo)	points	(short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	110,342.44	3	0.0038
Un-Treated (White)	PM10	4.60E-05	46,155.00	3	0.0032
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	108,691.70	5	0.0062
Un-Treated (White)	PM10	4.60E-05	19,477.60	5	0.0022
Rail Direct to Vessel			-		
Treated (Red)	PM10	2.30E-05	152,099.90	7	0.0122
Un-Treated (White)	PM10	4.60E-05	20,905.60	7	0.0034
OTHER PRODUCTS ¹	(no storage of oth	er products)			
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
	To	tal Amount Handled:	457,672.24		0.0311

^{1.} No other products are currently handled, however, other dry bulk products may be handled in the future.

June 2008

Emission Source	Emission Type	Controlled Emission Factor E Ibs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	67,939.94	3	0.0023
Un-Treated (White)	PM10	4.60E-05	25,388.25	3	0.0018
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	60,202.17	5	0.0035
Un-Treated (White)	PM10	4.60E-05	19,564.68	5	0.0022
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	100,209.73	7	0.0081
Un-Treated (White)	PM10	4.60E-05	50,870.72	7	0.0082
OTHER PRODUCTS ¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
<u> </u>					

July 2008

		Controlled			
Emission Source	Emission	Emission Factor	Amount	Number	Emissions
	Type	E	Handled	of transfer	
		lbs/ton	(ST This Mo)	points	(short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	21,140.99	3	0.0007
Un-Treated (White)	PM10	4.60E-05	28,174.66	3	0.0019
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	16,872.93	5	0.0010
Un-Treated (White)	PM10	4.60E-05	21,742.58	5	0.0025
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	55,241.87	7	0.0044
Un-Treated (White)	PM10	4.60E-05	33,436.82	7	0.0054
OTHER PRODUCTS	(
O MEKT KOBOOTO	(no storage of other products)				
Rail Direct to Vessel	 				
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000

August 2008

Emission Source	Emission Type	Controlled Emission Factor E Ibs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	72,414.41	3	0.0025
Un-Treated (White)	PM10	4.60E-05	39,179.33	3	0.0027
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	51,753.70	5	0.0030
Un-Treated (White)	PM10	4.60E-05	38,384.94	5	0.0044
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	105,767.30	7	0.0085
Un-Treated (White)	PM10	4.60E-05	47,022.16	7	0.0076
OTHER PRODUCTS ¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000

September 2008

Emission Source	Emission Type	Controlled Emission Factor E Ibs/ton	Amount Handled	Number of transfer	Emissions
		IDS/IOH	(ST This Mo)	points	(short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	85,661.19	3	0.0030
Un-Treated (White)	PM10	4.60E-05	55,099.29	3	0.0038
1					
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	70,952.36	5	0.0041
Un-Treated (White)	PM10	4.60E-05	41,181.90	5	0.0047
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	113,720.04	7	0.0092
Un-Treated (White)	PM10	4.60E-05	27,402.68	7	0.0044
Į.					
OTHER PRODUCTS ¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000

October 2008

Emission Source	Emission Type	Controlled Emission Factor E Ibs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage				· · · · · · · · · · · · · · · · · · ·	
Treated (Red)	PM10	2.30E-05	38,277.75	3	0.0013
Un-Treated (White)	PM10	4.60E-05	53,819.01	3	0.0037
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	35,183.64	5	0.0020
Un-Treated (White)	PM10	4.60E-05	62,942.44	5	0.0072
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	67,693.96	7	0.0054
Un-Treated (White)	PM10	4.60E-05	23,383.06	7	0.0038
OTHER PRODUCTS ¹	(no storage of other products)				
Rail Direct to Vessel	ļ		ļ		
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000 0.0000
	, , , , ,		0.00		0.0000

November 2008

Emission Source	Emission Type	Controlled Emission Factor E Ibs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage			(= ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	ponito	(Griore torio)
Treated (Red)	PM10	2.30E-05	28,461.64	3	0.0010
Un-Treated (White)	PM10	4.60E-05	38,750.59	3	0.0027
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	22,044.82	5	0.0013
Un-Treated (White)	PM10	4.60E-05	20,453.25	5	0.0024
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	40,242.78	7	0.0032
Un-Treated (White)	PM10	4.60E-05	25,753.95	7	0.0041
OTHER PRODUCTS ¹	(no storage of other products)				
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000

December 2008

Emission Source	Emission Type	Controlled Emission Factor E Ibs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Rail to Storage					
Treated (Red)	PM10	2.30E-05	23,342.97	3	0.0008
Un-Treated (White)	PM10	4.60E-05	66,458.29	3	0.0046
Storage to Vessel					
Treated (Red)	PM10	2.30E-05	378.43	5	0.0000
Un-Treated (White)	PM10	4.60E-05	51,903.01	5	0.0060
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	46,210.37	7	0.0037
Un-Treated (White)	PM10	4.60E-05	35,662.39	7	0.0057
OTHER PRODUCTS ¹	(no storage of oth	er products)			
Rail Direct to Vessel					
Treated (Red)	PM10	2.30E-05	0.00	7	0.0000
Un-Treated (White)	PM10	4.60E-05	0.00	7	0.0000
	<u></u>				

From: Origin ID: MRIA (503) 285-4200 Katrina Greene Kinder Morgan Terminals, Inc.

Portland, OR 97203

15550 N Lombard Street



SHIP TO: (503) 285-4200

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Delivery Address Bar Code



Ref# Invoice # PO# Dept #

0201

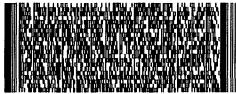
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- 3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com.FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery,misdelivery,or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim.Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental,consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$500, e.g. jewelry, precious metals, negotiable instruments and other items listed in our ServiceGuide. Written claims must be filed within strict time limits, see current FedEx Service Guide.



Kinder Morgan Terminals, Inc.

January 22, 2008

Ms. Tina Leppaluoto
Department of Environmental Quality
NWR – East Side Office
1550 NW Eastman Parkway
Suite 290
Gresham, Oregon 97030

Re: Air Contaminant Discharge Permit No. 26-3071

Dear Ms. Leppaluoto:

I have enclosed an original and two (2) copies of Kinder Morgan Terminals, Inc. annual Air Contaminant Discharge Report for our facility located at Terminal 5 in Portland, Oregon.

If you should have any questions regarding the report, please call Brent McMullin or myself at 503-285-4200.

Sincerely,

Gene Ellis

Terminal Manager

Kinder Morgan Bulk Terminals, Inc.

Cc: Air Permit Annual Report File

GE:jaw

KINDER MORGAN TERMINALS, INC.

Portland Bulk Terminals, Terminal 5 Air Contaminant Discharge Permit No. 26-3071 Annual Report to Oregon Department of Environmental Quality

Instructions: This form [there are five (5) pages to the form] must be completed and submitted to the DEQ no later than January 15th of each year for operations during the previous calendar year. Mail the original and two copies to: Department of Environmental Quality, 2020 SW 4th Avenue, Suite No. 400, Portland, OR 97201-5884.

Mail a copy of the report to Corporate Environmental Affairs in Sorrento.

This report is for the calendar year January 1, 2007 to December 31, 2007.

A. In the space below, or on a separate sheet of paper attached to this form, list the amounts (tons/year) and types of commodities shipped and received during the report year.

Refer to attached sheets

B. Summarize below (or attach separate sheets) all fugitive dust complaints received by PBT-5 from any public citizen during the report year.

None

C. Attach to this sheet an Upset Log sheet for all excess emissions that occurred during the report year. See attached

If no excess emissions occurred during the report year, check the statement below and sign your name where indicated and enter the date and your title.

THIS IS TO CERTIFY THAT NO EXCESS EMISSIONS OCCURRED AT THIS FACILITY DURING THE REPORT YEAR.

Signed Gene Ellis

Date January 22, 2008

Title Terminal Manager

PBT-:	5 Annual Air Report	
D.	In the space below, explain any permanent changes made in terriproducts handled which would affect air contaminant emissions changes were made.	•
	If no such changes were made in the report year, check here:	_X NONE

Page 5 PBT-5 Annual Air Report

E. List on this page (or attach a separate sheet showing) all maintenance performed on air pollution equipment during the report year.

Refer to attached



PORTLAND BULK TERMINALS DUST COLLECTOR MAINTENANCE MONTHLY

ENVIRONMENTAL COMPLIANCE REPORT

DOCUMENT ALL REPAIRS AS REQUIRED IN THE AIR CONTAMINANT DISCHARGE PERMIT EFFECTIVE 7/11/02.

	DOCUMENT ALL RE	PAIRS AS REQUIRED IN THE AIR C repairs pertaining to Dust Collectors, Cyc	lones and their components and	will be loaged on this sheet.	
January	msuucaon. An	·			T
DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A	Unplugged system	Unplugged system			
DC-1B	Unplugged system	Unplugged system	.	<u> </u>	
DC-2	Unplugged system	Unplugged system	,		
DC-3	Unplugged system	Unplugged system	Unplugged system		
DC-4	Unplugged system	Unplugged system	Unplugged system		
DC-5	Unplugged system	Unplugged system Unplugged system	Unplugged system		<u> </u>
DC-6	Unplugged system	Unplugged system	Cripiagges system		
DC7-A DC7-B	Unplugged system				
DC1-B	Toriplagged system			<u> </u>	
February	Instruction: All	repairs pertaining to Dust Collectors, Cyc	lones and their components and	will be logged on this sheet.	
DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A	Unplugged system			<u>, </u>	
DC-1B	Unplugged system				
DC-2	Unplugged system	Unplugged system		 	
DC-3	Unplugged system	Unplugged system			
DC-4	Unplugged system	Unplugged system		 	
DC-5	Unplugged system	Unplugged system			
DC-6	Unplugged system	Unplugged system			
DC7-A	<u> </u>		 		
DC7-B	Unplugged system	L		<u> </u>	<u> </u>
March	Instruction: All	repairs pertaining to Dust Collectors, Cyc	lones and their components and	will be logged on this sheet.	
DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A	Unplugged system				
DC-1B	Unplugged system				
DC-2	Unplugged system	Unplugged system			
DC-3	Unplugged system	Unplugged system			
DC-4	Unplugged system	Unplugged system	Unplugged system		1
DC-5	Unplugged system	Unplugged system			
DC-6	Unplugged system	Unplugged system			<u> </u>
DC7-A					
DC7-B	Unplugged system		<u> </u>	<u></u>	<u>.l., </u>
April		repairs pertaining to Dust Collectors, Cyc	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
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DC-2 DC-3	Unplugged system Unplugged system Unplugged system Unplugged system Unplugged system	Unplugged system	Unplugged system Unplugged system		
DC-2 DC-3 DC-4 DC-5	Unplugged system Unplugged system Unplugged system	Unplugged system Unplugged system Unplugged system	Unplugged system Unplugged system Unplugged system		
DC-2 DC-3 DC-4 DC-5 DC-6	Unplugged system Unplugged system Unplugged system Unplugged system Unplugged system	Unplugged system Unplugged system Unplugged system	Unplugged system Unplugged system Unplugged system		
DC-2 DC-3 DC-4 DC-5 DC-6 DC7-A DC7-B	Unplugged system	Unplugged system Unplugged system Unplugged system Unplugged system	Unplugged system Unplugged system Unplugged system Unplugged system	will be logged on this sheet.	
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ugust		All repairs pertaining to Dust Collectors	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
UST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	RETAIN ACTION
DC-1A					
DC-1B					
DC-2	Unplugged system	Unplugged system			
DC-3	Unplugged system	Unplugged system			
DC-4	Unplugged system	Unplugged system	Unplugged system		
DC-5	Unplugged system	Unplugged system	Unplugged system		
DC-6	Unplugged system	Unplugged system			
DC7-A					
DC7-B					

September	Instruction: A	All repairs pertaining to Dust Collectors, Cy	clones and their components and	will be logged on this sheet.	
DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY
DC-1A					
DC-1B			1		
DC-2	Unplugged system	Unplugged system			
DC-3	Unplugged system	Unplugged system			
DC-4	Unplugged system	Unplugged system			
DC-5	Unplugged system	Unplugged system			
DC-6	Unplugged system	Unplugged system			
DC7-A					
DC7-B					

October	Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.								
DUST COLLECTOR	AIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY				
DC-1A	Change Bags								
DC-1B	Change Bags								
DC-2	Unplugged system	Unplugged system							
DC-3	Unplugged system	Unplugged system	Unplugged system						
DC-4	Unplugged system	Unplugged system	Unplugged system						
DC-5	Unplugged system	Unplugged system	Unplugged system						
DC-6	Unplugged system	Unplugged system							
DC7-A				<u> </u>					
DC7-B	Unplugged system								

Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.

REPAIR ACTIVITY REPAIR ACTIVITY REPAIR ACTIVITY REPAIR ACTIVITY November REPAIR ACTIVITY DUST COLLECTOR DC-1A DC-1B DC-2 Unplugged system Unplugged system DC-3 Unplugged system Unplugged system Unplugged system
Unplugged system Unplugged system DC-5 Unplugged system DC-6 Unplugged system Unplugged system DC7-A DC7-B

December	Instruction: A	Instruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.									
DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY						
DC-1A											
DC-1B											
DC-2	Unplugged system	Unplugged system									
DC-3	Unplugged system	Unplugged system	Unplugged system								
DC-4	Unplugged system	Unplugged system									
DC-5	Unplugged system	Unplugged system									
DC-6	Unplugged system	Unplugged system		<u> </u>							
DC7-A											
DC7-B				<u> </u>							

REPAIR LOG	Instruction: All repairs pertain	nstruction: All repairs pertaining to Dust Collectors, Cyclones and their components and will be logged on this sheet.									
DUST COLLECTOR	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY	REPAIR ACTIVITY						
DC-1A	Balanced Blowers										
DC-1B	Balanced Blowers										
DC-2	Balanced Blowers										
DC-3	Balanced Blowers			l							
DC-4	Balanced Blowers										
DC-5	Replaced Rotary Valve	Welded up holes in Transfer Chute	Balanced Blowers								
DC-6	Balanced Blowers			i							
DC7-A					1						
DC7-B	Balanced Blowers										

		TOTA	AL CARGO	HANDLED 2007		
RAII	TO SHIP		STORAGE	STORAGE TO SHIP		TOTAL TONS
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded	SHIPPED	HANDLED
16,166	1,667,350.793	9,932	1,018,013.385	1,071,520.542	2,738,871.335	3,756,884.720
ADJUSTME					0	
ACTUAL CA	ARGO HANDLE	D			2,738,871.335	
ł			IANIIAD	TOTALS		
PAIL	TO SHIP	RAII TO	STORAGE	STORAGE TO SHIP	TOTAL TONS	TOTAL TONS
# Cars	Tons Loaded		Tons Loaded	Tons Loaded	SHIPPED	HANDLED
1146	117,506.478	1,464	150,046.709	54,081.722	171,588.200	321,634.909
	<u></u>	· · · · · · · · · · · · · · · · · · ·			-	
L				Y TOTALS		T=0=11 =010
	TO SHIP		STORAGE		TOTAL TONS	TOTAL TONS
# Cars	Tons Loaded	# Cars 730	Tons Loaded	Tons Loaded 115,272.159	SHIPPED 304,906.900	380,154.570
1,743	189,634.741	730	75,247.670	115,272,155	304,906.900	380,154.570
			MARCH	TOTALS		
RAIL	TO SHIP	RAIL TO	STORAGE		TOTAL TONS	TOTAL TONS
# Cars	Tons Loaded		Tons Loaded	Tons Loaded	SHIPPED	HANDLED
1,349	137,644.502	645	65,798.493	98,837.898	236,482.400	302,280.893
L				TOTALS	TOTAL TONG	TOTAL TONS
	TO SHIP		STORAGE	STORAGE TO SHIP Tons Loaded	TOTAL TONS SHIPPED	HANDLED
# Cars	Tons Loaded	# Cars	Tons Loaded 92,305.595	103,395.925	228,747.345	321,052.940
1223	125,351.420	1 301	02,300.555	100,030.320		J - 1,002.040
			MAY T	OTALS		
RAIL	TO SHIP	RAIL TO	STORAGE		TOTAL TONS	TOTAL TONS
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded	SHIPPED	HANDLED
1,036	106,148.678	1226	125,629.611	116,932.323	223,081.001	348,710.612
				OTALS	TOTAL TONG	TOTAL TONG
	TO SHIP		Tons Loaded	STORAGE TO SHIP Tons Loaded	TOTAL TONS SHIPPED	TOTAL TONS HANDLED
# Cars 1,081	Tons Loaded 110,796.459	# Cars	80,264.665	95,813.341	206,609.800	286,874.465
1,081	110,730.433	700	1 00,204.000	00,010.041	200,000.000	200,0771100
1			JULY T	OTALS		
RAIL	TO SHIP	RAIL TO	STORAGE	STORAGE TO SHIP	TOTAL TONS	TOTAL TONS
# Cars	Tons Loaded	# Cars	Tons Loaded	Tons Loaded	SHIPPED	HANDLED
1,527	156,469.077	598	61,244.871	64,825.023	221,294.100	282,538.971
			ALICHOT	TOTALS		
DAII	TO SHIP	PAII T	STORAGE	TOTALS STORAGE TO SHIP	TOTAL TONS	TOTAL TONS
# Cars	Tons Loaded		Tons Loaded	Tons Loaded	SHIPPED	HANDLED
1281	131,274.750	434	44,498.259	52,192.350	183,467.100	227,965.359
						*
		-		R TOTALS		T -0- 0
	TO SHIP		STORAGE	STORAGE TO SHIP		TOTAL TONS
# Cars	Tons Loaded		Tons Loaded	Tons Loaded	SHIPPED 257,374.600	330,992.547
1,627	166,802.162	718	73,617.947	90,572.438	201,314.000	330,332.34/
			OCTOBE	R TOTALS		
RAIL	TO SHIP	RAIL TO	STORAGE	STORAGE TO SHIP	TOTAL TONS	TOTAL TONS
# Cars	Tons Loaded		Tons Loaded	Tons Loaded	SHIPPED	HANDLED
2,352	241,107.080	450	46,077.078	55,450.349	296,557.429	342,634.507
				R TOTALS	TOTAL TONG	TOTAL ZONO
	TO SHIP		STORAGE	STORAGE TO SHIP	i	TOTAL TONS
# Cars 1279	Tons Loaded 131,103.500	# Cars 889	Tons Loaded 91,129.783	Tons Loaded 101,910.300	SHIPPED 233,013.800	324,143.583
12/9	131,103.500	003	31,123.703	101,310.300	233,013.600	324,143.303
			DECEMBE	R TOTALS		
RAIL	TO SHIP	RAIL TO	STORAGE	STORAGE TO SHIP	TOTAL TONS	TOTAL TONS
# Cars	Tons Loaded		Tons Loaded	Tons Loaded	SHIPPED	HANDLED
522	53,511.946	1094	112,152.704	122,236.714	175,748.660	287,901.364

2007 ANNUAL RAIL AND STORAGE CARGO ACTIVITY ENVIRONMENTAL REPORT

	Bay	#1	Bay	#2	Bay	#3	Bay	r#4	Вау	#5	Bay	¥6	Tota	nis
	ln	Out	In	Out	In	Out	In	Out	In	Out	in	Out	ln	Out
January	3,286.248	0.000	0.000	0.000	36,151.487	19,255.200	29,297.600	4,013.672	82,311.374	30,812.850	N/A	N/A	151,046.709	54,081.722
February	12,030.891	11,496.662	6,891.936	4,021.600	7,840.241	25,770.292	1,742.103	23,206.775	46,742.499	50,776.830	N/A	N/A	75,247.670	115,272.159
March	3,698.568	11,193.661	102.468	4,021.600	10,101.901	25,780.600	14,725.650	510.400	37,169.906	63,559.205	N/A	N/A	65,798.493	105,065.466
April	3,092.864	3,497.325	1,650.555	0.000	6,294.296	17,430.000	2,063.097	9,357.600	79,204.783	73,111.000	N/A	N/A	92,305.595	103,395.925
May	6,492.539	11,006.200	206.272	6,721.700	29,318.197	17,757.600	17,125.780	15,018.500	72,486.823	66,428.323	N/A	N/A	125,629.611	116,932.323
June	2,468.315	0.000	3,189.116	0.000	12,901.062	25,123.231	10,399.538	5,516.000	51,306.634	60,668.510	N/A	N/A	80,264.665	91,307.741
July	5,981.373	0.000	5,259.680	9,974.807	17,045.158	13,090.200	102.988	0.000	32,855.672	41,760.016	N/A	N/A	61,244.871	64,825.023
August	2,168.206	0.000	4,846.614	0.000	12,695.187	14,305.030	0.000	0.000	24,788.252	37,887.320	N/A	N/A	44,498.259	52,192.350
September	2,266.210	10,042.176	9,376.613	0.000	12,865.425	18,414.062	11,335.140	20,974.800	37,774.559	41,141.400	N/A	N/A	73,617.947	90,572.438
October	8,351.432	0.000	4,332.560	7,001.200	412.886	4,211.370	3,303.700	5,638.409	29,676.500	38,599.370	N/A	N/A	46,077.078	55,450.349
November	722.664	4,282.400	3,613.340	9,646.000	28,015.093	17,894.000	10,369.903	10,031.936	48,408.783	60,055.964	40,785.746	0.000	131,915.529	101,910.300
December	0.000	10,263.504	6,393.070	0.000	15,054.970	10,808.800	11,609.835	9,146.200	74,978.049	49,514.049	30,844.038	38,863.184	138,879.962	118,595.737
													0.000	0.000
TOTALS	50,559.310	61,781.928	45,862.224	41,386.907	188,695.903	209,840.385	112,075.334	103,414.292	617,703.834	614,314.837	71,629.784	38,863.184	1,086,526.389	1,069,601.533

KINDER MORGAN BULK TERMINAL 5 ROLLING 12-MONTH EMISSIONS

MONTH/YEAR	COMBINED TOTAL - SHORT TONS HANDLED	PM ₁₀ EMISSIONS - SHORT TONS PER MONTH
January, 2007	321,634.91	0.0354
February, 2007	380,154.57	0.0488
March, 2007	302,280.89	0.0362
April, 2007	321,052.94	0.0382
May, 2007	348,710.61	0.0392
June, 2007	286,874.47	0.0343
July, 2007	282,538.97	0.0367
August, 2007	227,965.36	0.0301
September, 2007	330,992.55	0.0422
October, 2007	342,634.51	0.0482
November, 2007	324,143.58	0.0390
December, 2007	287,901.36	0.0303
12 Month Totals:	3,756,884.72	0.4586
	Permit Limit:	14.0000

January 2007

	Tot	tal Amount Handled:	321,634.91		0.0354
no storage of other products)					
Rail Direct to Vessel	PM10	4.60E-05	0.00	7	0.0000
OTHER PRODUCTS'					
Rail Direct to Vessel	PM10	4.60E-05	117,506.48	7	0.0189
Rail Direct to Vessel	DM40	4.005.05	447 500 40		
Storage to Vessel	PM10	4.60E-05	54,081.72	5	0.0062
Rail to Storage	PM10	4.60E-05	150,046.71	3	0.0103
POTASH					
Emission Source	Emission Type	Emission Factor E Ibs/ton	Amount Handled (ST This Mo)	Number of transfer points	Emissions (short tons)
Eminaian Cassas	Facilities	Controlled			

Notes:

February 2007

	To	tal Amount Handled;	380,154.57		0.0488
no storage of other products)				_	
Rail Direct to Vessel	PM10	4.60E-05	0.00	7	0.0000
OTHER PRODUCTS1					
Rail Direct to Vessel	PM10	4.60E-05	189,634.74	7	0.0305
Dail Disset to Vessel	DM40	4.005.05			
Storage to Vessel	PM10	4.60E-05	115,272.16	5	0.0132
Ivan to otorage	1 10110	4.00E-03	15,241.61	<u> </u>	0.0051
Rail to Storage	PM10	4.60E-05	75,247.67	3	0.0054
POTASH				7	
		lbs/ton	(ST This Mo)	points	(short tons)
	Туре	E	Handled	of transfer	
Emission Source	Emission	Controlled Emission Factor	Amount	Number	Emissions

Notes:

^{1.} No other products are currently handled, however, other dry bulk products may be handled in the future.

March 2006

	T-0.	tal Amount Handled:	302,280.89	<u> </u>	0.0362
no storage of other products)					
Rail Direct to Vessel	PM10	4.60E-05	0.00	7	0.0000
OTHER PRODUCTS ¹					
OTUED PRODUCTO					
Rail Direct to Vessel	FIVITU	4.60E-05	98,837.90	7	0.0159
Rail Direct to Vessel	PM10	4 605 05	00 027 00		0.0450
Storage to Vessel	PM10	4.60E-05	137,644.50	5	0.0158
	1 107 10	4.002-00	03,790.49	<u>3</u>	0.0045
Rail to Storage	PM10	4.60E-05	65,798.49	3	0.0045
POTASH					
		lbs/ton	(ST This Mo)	points	(short tons)
	Туре	E	Handled	of transfer	
Emission Source	Emission	Controlled Emission Factor	Amount	Number	Emissions

Notes:

April 2007

<u> </u>	tal Amount Handled:	321,052.94		0.0382
PM10	4.60E-05	0.00	7	0.0000
PM10	4.60E-05	125,351.42	7	0.0201
51445				
PM10	4.60E-05	103,395.93	5	0.0118
PM10	4.60E-05	92,305.60	3	0.0063
DM40	1005.05			
	lbs/ton	(ST This Mo)	points	(short tons)
Emission Type	Emission Factor E	Amount Handled	Number of transfer	Emissions
	PM10 PM10 PM10 PM10	Type E lbs/ton PM10 4.60E-05 PM10 4.60E-05 PM10 4.60E-05 PM10 4.60E-05	Emission Type Emission Emission Factor E Ibs/ton Amount Handled (ST This Mo) PM10 4.60E-05 92,305.60 PM10 4.60E-05 103,395.93 PM10 4.60E-05 125,351.42 PM10 4.60E-05 0.00	Emission Type Emission Factor E Ibs/ton Amount Handled (ST This Mo) Number of transfer points PM10 4.60E-05 92,305.60 3 PM10 4.60E-05 103,395.93 5 PM10 4.60E-05 125,351.42 7 PM10 4.60E-05 0.00 7

Notes:

MAY 2007

	To	tal Amount Handled:	348,710.61		0.0392
no storage of other products)					
Rail Direct to Vessel	PM10	4.60E-05		7	0.0000
OTHER PRODUCTS1				······	
OTHER PROPILATE					
Nail Direct to vessel	PM10	4.60E-05	106,148.68	77	0.0170
Rail Direct to Vessel	DM10	4.600.05	400 440 00		
Storage to Vessel	PM10	4.60E-05	116,932.32	5	0.0134
Nail to Storage	FIVITO	4.00E-05	125,629.61	3	0.0086
Rail to Storage	PM10	4.60E-05	125,629.61	3	0.0000
POTASH					
		lbs/ton	(ST This Mo)	points	(short tons)
	Туре	E	Handled	of transfer	
Emission Source	Emission	Controlled Emission Factor	Amount	Number	Emissions

Notes:

June 2007

	To	tal Amount Handled:	286,874.47		0.0343
no storage of other products)					
Rail Direct to Vessel	PM10	4.60E-05	0.00	7	0.0000
OTHER I RODUCTS					
OTHER PRODUCTS ¹					
Rail Direct to Vessel	PM10	4.60E-05	110,796.46	7	0.0178
B 11B1 11 11					
Storage to Vessel	PM10	4.60E-05	95,813.34	5	0.0110
Rail to Storage	PM10	4.60E-05	80,264.67	3	0.0055
POTASH					
		100/1011	(01 1113 100)	ponts	(SHOIT TOHS)
	Туре	E lbs/ton	Handled (ST This Mo)	of transfer points	(short tons)
Emission Source	Emission	Controlled Emission Factor	Amount	Number	Emissions

Notes:

July 2007

	To	tal Amount Handled:	282,538.97		0.0367
no storage of other products)					
Rail Direct to Vessel	PM10	4.60E-05	0.00	7	0.0000
OTHER PRODUCTS'					
OTHER PROPILOTO					
Rail Direct to Vessel	PM10	4.60E-05	156,469.08	7	0.0251
Rail Direct to Vessel	DM10	4 605 05	450 400 00		0.0074
Storage to Vessel	PM10	4.60E-05	64,825.02	5	0.0074
Kall to Storage	PIVITO	4.00E-05	61,244.87	3	0.0042
Rail to Storage	PM10	4.60E-05	64 244 07		0.0040
POTASH					
		lbs/ton	(ST This Mo)	points	(short tons)
	Туре	. E	Handled	of transfer	
Emission Source	Emission	Controlled Emission Factor	Amount	Number	Emissions

Notes:

August 2007

	То	tal Amount Handled:	227,965.36	**************************************	0.0301
no storage of other products)					
Rail Direct to Vessel	PM10	4.60E-05	0.00	7	0.0000
OTHER PRODUCTS ¹					
Rail Direct to Vessel	PM10	4.60E-05	131,274.75	7	0.0211
				5	0.0060
Storage to Vessel	PM10	4.60E-05	52,192.35	5	0.0060
Rail to Storage	PM10	4.60E-05	44,498.26	3	0.0030
POTASH					
		lbs/ton	(ST This Mo)	points	(short tons)
Emission Source	Emission Type	Controlled Emission Factor E	Amount Handled	Number of transfer	Emissions

Notes:

September 2007

	То	tal Amount Handled:	330,992.55		0.0422
no storage of other products)					
Rail Direct to Vessel	PM10	4.60E-05	0.00	7	0.0000
OTHER PRODUCTS ¹					
					V-0.01
Rail Direct to Vessel	PM10	4.60E-05	166,802.16	7	0.0268
Storage to vesser	FIVITO	4.000-05	90,572.44	5	0.0104
Storage to Vessel	PM10	4.60E-05	90,572.44	E	0.0404
Rail to Storage	PM10	4.60E-05	73,617.95	3	0.0050
TOTAGE					
POTASH					
		lbs/ton	(ST This Mo)	points	(short tons)
	Туре	E	Handled	of transfer	Lillissions
Emission Source	Emission	Controlled Emission Factor	Amount	Number	Emissions

Notes:

October 2007

	To	tal Amount Handled:	342,634.51		0.0482
no storage of other products)					
Rail Direct to Vessel	PM10	4.60E-05	0.00	7	0.0000
OTHER PRODUCTS'					
OTUED PRODUCTO					
Rail Direct to Vessel	PM10	4.60E-05	241,107.08	7	0.0388
Rail Direct to Vessel	DM440	4.605.05	044 407 00		0.000
Storage to Vessel	PM10	4.60E-05	55,450.35	5	0.0063
Nail to otolage	7 10110	4.00E-03	40,077.00	<u> </u>	0.0031
Rail to Storage	PM10	4.60E-05	46,077.08	3	0.0024
POTASH					
		lbs/ton	(ST This Mo)	points	(short tons)
	Туре	E	Handled	of transfer	
Emission Source	Emission	Controlled Emission Factor	Amount	Number	Emissions

Notes:

November 2007

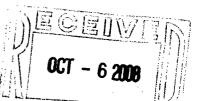
	To	tal Amount Handled:	324,143.58		0.0390
no storage of other products)					
Rail Direct to Vessel	PM10	4.60E-05	0.00	7	0.0000
				_	
OTHER PRODUCTS ¹					
Nan Direct to Vesser	FIVITO	4.00L-03	131,103.50		0.0211
Rail Direct to Vessel	PM10	4.60E-05	131,103.50	7	0.0344
Storage to Vessel	PM10	4.60E-05	101,910.30	5	0.0117
Rail to Storage	PIVITO	4.60E-05	91,129.78	3	0.0062
Rail to Storage	PM10	4.60E-05	04 420 70		0.000
POTASH					
		lbs/ton	(ST This Mo)	points	(short tons)
Emission Source	Type	E	Amount Handled	Number of transfer	Emissions
Emission Source	Emission	Controlled Emission Factor	A	Niversia	

Notes:

December 2006

		Controlled			
Emission Source	Emission	Emission Factor	Amount	Number	Emissions
	Туре	E	Handled	of transfer	
		lbs/ton	(ST This Mo)	points	(short tons)
POTASH					
Rail to Storage	PM10	4.60E-05	112,152.70	3	0.0077
Storage to Vessel	PM10	4.60E-05	122,236.71	5	0.0140
Rail Direct to Vessel	PM10	4.60E-05	53,511.95	7	0.0086
OTHER PRODUCTS ¹					
Rail Direct to Vessel	PM10	4.60E-05	0.00	7	0.0000
(no storage of other products)					2.300
	Tot	al Amount Handled:	287,901.36		0.0303

Notes:



DEQ INSPECTION REPORT Northwest Region – Air Quality Section

	Facility Name and Address:	Permit Number: 26-3071	
	Kinder Morgan Bulk Terminals, Inc. 15550 N. Lombard St. Portland, OR 97203	County: Multnomah	
1			

Inspection Date/Time:	Reason for	Regularly scheduled inspection	
9-09-2008	Inspection:	Complaint follow-up	
9:00 am	(check one)	Other (specify) verify compliance with white product while loading a ship.	X

	ACDP	X		FCE/PCE (specify)	
Permit Type:			Inspection Type:	State Inspection	X
(check one)	Title V		(check two)	Announced	X
				Unannounced	

Inspector(s): (Name, Title and Agency	Tina Leppaluoto, Natural Resource Specialist DEQ-NWR/AQ,	
Air Quality Manager	Ed Druback, Northwest Region (503) 229-5151	

Facility Representative(s):	Neil Maunu, Assistant Terminal Manager, 503-285-4200
(Name, Title and Phone #)	Jack Waller, Terminal Manager, 503-285-4200
	Brent McMullin, Regional EHS Manager, 503-936-5622

Overview of Facility

The permittee operates a bulk fertilizer products marine loading facility at the Port of Portland's Terminal 5. The facility primarily handles potash, sulfate of potash, urea and soda ash. Construction of the facility began in 1986 by the Port of Portland and by 1996 construction was resumed by the permittee and completed for operations in 1997.

Process and Control Devices

• Existing air contaminant sources at the facility consist of the following:

Process	Baghouses	Max. Speed	Installed
Ship loader	2	19,250 CFM	2000
Bottom dump	2, with cyclones	27,100 CFM	2000
Tower 3	1, with cyclone	11,000 CFM	2000

28 57			
Tower 4	1, with cyclone	10,000 CFM	2000
Tower 5	1, with cyclone	10,000 CFM	2000
Tower 6	1, with cyclone	13,000 CFM	2000
Tower 7	1	5,000 CFM	2000

Pre-inspection File Review

A review of the facility file indicates that the annual report was received and found to be in compliance with the current permit conditions. The facility has not received any complaints and no enforcement actions have been taken against the facility since the last permit renewal. The facility was inspected on 9/9/05 and found to be in compliance with the permit conditions.

Walk-through of Facility

The facility was operating at the time of the inspection a ship was being loaded with 7,000 metric tons of white standard product. One baghouse is used when loading white and red product, a backup baghouse is in place for use during maintenance of the original baghouse. The pressure is monitored during all operations of the baghouses during the ship loadings. The opacity was not visible during the ship loading although, when the spout was being brought up out of the haul of the ship particulate of 10 to 12% was being observed. The facility's baghouses have been plugging up with product during operations of loading and unloading. The permittee has installed air cannons back in May for each of the cyclones which keeps the lines free of accumulation of the product. The baghouses are operating better with less plugging now that the air cannons are in place. A maintenance schedule is being put together over the next couple of months for the air cannons in order to maintain the operations of the new equipment. The air cannons are placed at the first dust collector #4 from storage, two are placed at the rail pit, one was placed at tower 3, one was placed at the ship loader and one was placed at the dock.

During the ship loading of white standard product it was observed that product was coming off of the conveyer from tower 3. It was inspected immediately and found to have a hole worn in the flange. The operators did a quick fix to cover up the hole to stop the product from falling through the hole onto the ground. Tower 3 is equipped with containment in case of product loss during loading operations. Since there was a large amount of contaminated product on the ground, it will be swept up, bagged and taken to the landfill. For small amounts the contaminated product is washed down into the containment area which then goes to a filtered tank and metered slowly to the City waters. West Coast Marine comes in before each product change and washes down the excess material to prevent cross contamination. The conveyer was currently set to run at 2,000 tons an hour maximum for white product. This is done to avoid plugging of the baghouse during the loading of the product.

The facility was well maintained with only a few areas of product build up which is cleaned up after each shift. C-7 is one areas of concern when loading a ship, it was

mentioned by the assistant manager during the inspection that a tarp will be put in place to contain the product that falls from the belt onto the ground. Currently it is fenced off so facility operators do no track it through the facility grounds. If winds are present during the loading of the product this product can be blown around, it needs to be controlled at all times. The thought of putting a tarp in place to keep the product contained until it could be cleaned up may help.

The annual compliance report was discussed to verify the permit conditions were being met. The annual reports will be more detailed for the equipment operations and the process of shutdown to make sure emissions are being controlled during facility operations. The permittee will also include more details on the products that are being used and the emissions from those products.

Compliance status of facility

Check one of the following:

X	Facility is in compliance with the permit conditions described above.
	Facility is not in compliance with one or more of the permit conditions described
	above (provide additional detail below).

cc: Brent McMullin, Regional Environmental,
Health & Safety Manaer
Kinder Morgan Terminals, Inc.
West Coast Region
1057 Officers Row
Vancouver, WA 98661



INDUSTRIAL HYGIENE SURVEY

Potassium Chloride Dust Monitoring

Submitted to:

SGS NA Minerals 15550 N Lombard Port of Portland - Terminal 5 Portland, Oregon 97203

Submitted by:

AMEC Earth & Environmental, Inc. 7376 SW Durham Road Portland, Oregon 97224

8-61M-118260

June 2008

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June 25, 2008

8-61M-118260

David B. Nagel Portland Area Manager Minerals Services Division SGS NA Minerals 15550 N Lombard - Terminal 5 Portland, Oregon 97203

Dear Mr. Nagel:

Re: **Industrial Hygiene Survey**

Potassium Chloride Dust Monitoring

Port of Portland - Terminal 5

Portland, Oregon

AMEC Earth & Environmental, Inc. (AMEC) is pleased to submit the final Industrial Hygiene Survey Report documenting results of recent air monitoring for potassium chloride as total dust. The survey, conducted on May 15, 2008, examined potential exposure to potassium chloride as total dust during the unloading of railcars and loading of a ship at the Port of Portland's Terminal 5.

AMEC appreciates the opportunity to be of service to you. Please contact us at (503) 639-3400 if you have any questions concerning this report.

Sincerely,

AMEC Earth & Environmental, Inc.

Rob Roloson

Industrial Hygienist/Environmental Scientist

Garry Rossing Senior Associate

Attachments

RR/cw

AMEC Earth & Environmental, Inc. 7376 SW Durham Road Portland, Oregon USA 97224 Tel +1 (503) 639-3400

Fax +1 (503) 620-7892

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SGS NA Minerals Port of Portland - Terminal 5, Portland, Oregon Industrial Hygiene Survey, Potassium Chloride Dust Monitoring



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 Table 2 DustTrak™ Total Dust Results Conveyor 12 Graph

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Appendix A Photograph Log

Appendix B Laboratory Analysis Report



1.0 INTRODUCTION

At the request of Mr. David Nagel, Portland Area Manager for SGS NA Minerals (SGS), AMEC Earth & Environmental, Inc. (AMEC) performed an industrial hygiene survey to evaluate the potential total dust exposure of employees who collect composite samples of potassium chloride products, as they are unloaded from railcars and loaded onto a ship. Potassium chloride was sampled as total dust.

2.0 BACKGROUND INFORMATION AND OBSERVATIONS

SGS's services range from quality and quantity inspection and testing to advanced process control which optimizes the recovery of metals in processing plants through the implementation of expert systems. In support of their quality and quantity inspection and testing services, SGS employees often come into direct contact with mineral products.

The industrial hygiene survey was conducted on May 15, 2008 during the unloading of WSTD White product from approximately 31 Canotex railcars and the loading of G5l5 product onto a ship at Terminal 5 of the Port of Portland.

The WSTD White product was unloaded onto a conveyor system that begins underground and transports the product past a dust collector, emerging inside a sampling shed, to deposit the product into a large storage building. An SGS employee (Koury Sek) was standing inside the sampling shed collecting samples of the WSTD White product approximately every 5 minutes during the unloading process. A personal exposure sample was collected during this process and a TSI DustTrak™ Model 8520 Aerosol Monitor was placed in the sampling shed as an area monitor.

The G5I5 product was loaded by a "reclaimer" onto a conveyor system that begins inside the large storage building and transports the product past a sampling station and continues outside to load a ship. The sampling station was located inside the storage building "upstream" of the reclaimer. An SGS employee (Eugene Evett) was standing at the sampling station collecting samples of the G5I5 product approximately every 5 minutes during the loading process. A personal exposure sample was collected during this process. DustTrak™ data was unavailable for this process.

Sample results were compared to regulatory standards established by the State of Oregon's Occupational Safety and Health Division (OR-OSHA) Permissible Exposure Limits (PELs) for air contaminants as well as the American Conference of Governmental Industrial Hygienist (ACGIH®) threshold limit values (TLVs®).

Photographs of the sampling locations are located in Appendix A of this report.



3.0 SAMPLING METHODOLOGY

Air monitoring pumps were calibrated to an airflow rate in accordance with the sample method protocols both before and after sampling with a primary standard. An average of the pre- and post-calibration flow rates were used to calculate final sample volumes from the total elapsed sampling times. A quality control blank sample was prepared in the same manner as the other samples, with zero air volume. No samples were invalidated over the course of this survey. Samples remained under AMEC control until shipped via Federal Express to Bureau Veritas North America located in Lake Zurich, Illinois. The Bureau Veritas North America laboratory is accredited by the American Industrial Hygiene Association (AIHA) for analysis of samples by approved Occupational Safety and Health Administration (OSHA) and the National Institute of Occupational Safety and Health (NIOSH) methods.

Copies of analytical results are included in Appendix B.

3.1 Personal Air Monitoring

The personal exposure air samples were collected according to the OSHA protocol using a medium-flow personal air monitoring pump pre-calibrated to approximately two liters per minute and connected to a 37millimeter 0.8 micron matched weight mixed cellulose filter. The personal sample filters were secured to the employee's right or left lapel in the worker's breathing zone. Filter #27039737 was attached outside of the loose fitting Powered Air Purifying Respirator (PAPR) hood, within the breathing zone, according to OSHA protocol.

3.2 Area Air Monitoring

The area air samples were collected with a TSI DustTrak™ Model 8520 Aerosol Monitor. The TSI DustTrak™ was placed within the sampling stations near the employee and monitored at breathing level.

A graph of the TSI DustTrak™ data is included in Table 2.

4.0 RESULTS

For purposes of OR-OSHA compliance, no overexposures to total dust were documented on any of the samples taken over the course of the survey. When calculated for an 8-hour Time Weight Average (TWA), all personal exposure results show concentrations of total dust below the OR-OSHA PEL for Total Particulates (10 milligrams per cubic meter [mg/m³]) and ACGIH® TLV® for inhalable particles 10 mg/m³.

Project No.: 8-61M-118260 K:\11000\11800\11826\861m118260 SGS NA Minerals\861m118260 Industrial Hygiene Report SGS NA Minerals.doc

6/25/08



The results show that one personal sample for total dust (Sample #27039737 Eugene Evett) documented an exposure above the OR-OSHA PEL 10 mg/m³ and the ACGIH® TLV® 10 mg/m³ during the sample period, however, the calculated 8-hour TWA shows a total dust exposure of 4.58 mg/m³, less than half of the OR-OSHA PEL and ACGIH® TLV® of 10 mg/m³.

Sample results are summarized in Table 1.

5.0 DISCUSSION

The personal exposure sample #27039737 for Eugene Evett shows that *during the sample period* total dust exposure was above the OR-OSHA PEL and ACGIH® TLV® of 10 mg/m³. This indicates that if an employee was exposed to the same concentration of total dust for an 8-hour shift then the exposure would be above the OR-OSHA PEL and ACGIH® TLV® of 10 mg/m³. The elapsed time for this sample (Sample #: 27039737 Eugene Evett) was 200 minutes in duration and representative of the job task. When the result is calculated for an 8-hour TWA the concentration of total dust for this sample (Sample #27039737 Eugene Evett) is 4.58 mg/m³, less than half of the OR-OSHA PEL and ACGIH® TLV® of 10 mg/m³. This indicates that if an employee was exposed to the same concentration of total dust *for a similar duration of time*, then the exposure would be below OR-OSHA PEL and ACGIH® TLV® of 10 mg/m³. Eugene Evett was wearing a 3M Air-Stream BE-10 PAPR with a regular size loose fitting hood that provides a NIOSH approved protection factor of 25. This level of protection exceeds what is required by OR-OSHA and would protect a wearer up to 25 times the OR-OSHA PEL or up to 250 mg/m³ of total dust.

All other personal and area sample results show concentrations of total dust below the OR-OSHA PEL and ACGIH® TLV® of 10 mg/m³.

6.0 RECOMMENDATIONS

Based on the data collected during this survey, AMEC recommends the following:

- 1. Inform employees impacted by this evaluation of the monitoring results in accordance with OR-OSHA Hazard Communication Standard (1910.1200).
- 2. Continue to use administrative controls, such as limiting exposure time, to reduce total dust exposures.
- Continue to offer employees the option to wear N-95 nuisance dust masks and continue to encourage the use of the PAPR to reduce nuisance dust/smells associated with potassium chloride sampling.



- 4. Perform additional exposure monitoring when there has been any change in the production process, raw materials, equipment, personnel, work practices, or control methods that may result in new or additional exposures to total dust.
- 5. Maintain monitoring records in accordance with the OSHA recordkeeping standards. (29 CFR 1910.1020)

We appreciate the opportunity to be of service to you on this project. If you have any questions or comments regarding this report, please contact the undersigned at (503) 639-3400.

AMEC Earth & Environmental, Inc.

Rob Roloson

Environmental Scientist/Industrial Hygienist

Garry Rossing / Senior Associate

RR/cw

SGS NA Minerals
Port of Portland - Terminal 5, Portland, Oregon
Industrial Hygiene Survey, Potassium Chloride Dust Monitoring



LIMITATIONS

This report was prepared exclusively for SGS NA Minerals by AMEC Earth & Environmental, Inc. The quality of information, conclusions, and estimates contained herein is consistent with the level of effort involved in AMEC services and based on: i) information available at the time of preparation, ii) data supplied by outside sources, and iii) the assumptions, conditions, and qualifications set forth in this report. This Industrial Hygiene Survey is intended to be used by SGS NA Minerals only, subject to the terms and conditions of its contract with AMEC. Any other use of, or reliance on, this report by any third party is at that party's sole risk.

The findings contained herein are relevant to the dates of the AMEC Site visit and should not be relied upon to represent conditions at later dates. In the event that changes in the nature, usage, or layout of the property or nearby properties are made, the conclusions and recommendations contained in this report may not be valid. If additional information becomes available, it should be provided to AMEC so the original conclusions and recommendations can be modified as necessary.



TABLES

TABLE 1 SGS NA Minerals 15550 N Lombard

Port of Portland - Terminal 5 Portland, Oregon 97203

Potassium Chloride Sampled as Total Dust Results

Sample #	Time On/Off Total Minutes	Notes	Sample Results Total Dust (mg/m³)	Time Weighted Average Sample Results Total Dust (mg/m³)
27039736	Time on: 8:35 am Time off: 10:18 am Total Min: 103 min	Personal Sample: Koury Sek working in the sampling shed on Conveyor 12 sampling WSTD White product. Koury wore a 3M 8511 N-95 dust mask.	0.53 mg/m ³	0.11 mg/m ³
27039727	Time on: 11:40 am Time off: 11:55 am Total Min: 15 min	Personal Sample: Koury Sek working in the "riffle room" mixing composite samples of the WSTD White product. Koury wore a 3M 8511 N-95 dust mask.	<3.3 mg/m ³	ND
27039737	Time on: 1:10 pm Time off: 4:30 pm Total Min: 200 min	Personal Sample: Eugene Evett working on the sampling station within the storage building on Conveyor 16 sampling the G5I5 product. Eugene wore a 3M Air Stream Breathe Easy BE-10 Powered Air Purifying Respirator.	11 mg/m ³	4.58 mg/m ³
27059549	Time on: 4:51 pm Time off: 5:00 pm Total Min: 9 min	Personal Sample: Dale Morgan working in the "Riffle Room" mixing composite samples of the G5I5 product. No respiratory protection.	<5.6 mg/m ³	ND
27059551	Time on: NA Time off: NA Total Min: NA	Analytical Blank	Acceptable	Acceptable

Notes:

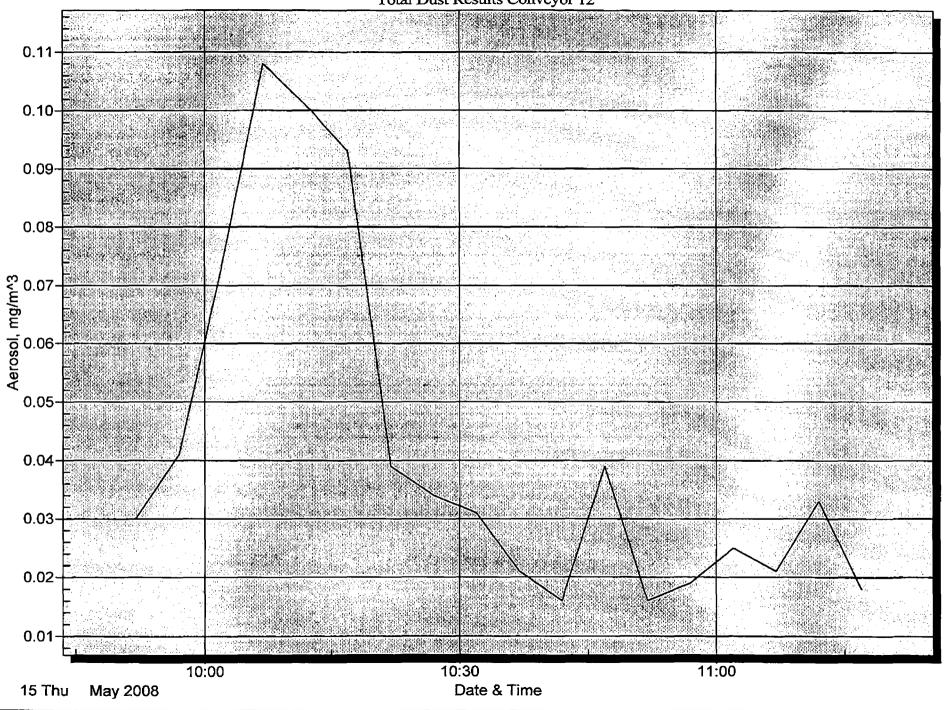
OR-OSHA/ACGIH Total Dust PELs/TLV = 10 mg/m³ as an 8-hour TWA.

OR-OSHA Oregon Occupational Safety and Health Administration
ACGIH American Conference of Governmental Industrial Hygienist

PELs Permissible Exposure Limits
TLV Threshold Limit Values
mg/m³ milligrams per cubic meter
TWA Time Weighted Average

ND None Detected NA Not Applicable

TABLE 2
Total Dust Results Conveyor 12





APPENDIX A

Photograph Log

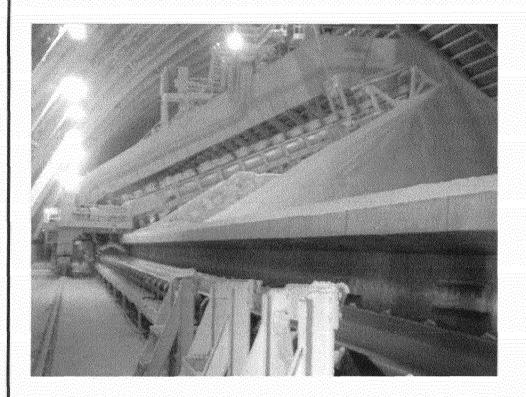


Photo 1 Conveyor 16 Storage Building

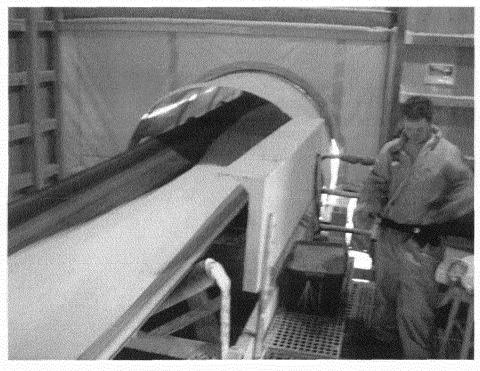


Photo 2 Conveyor 16 Sampling Station



7376 SW Durham Road Portland, Oregon 97224

W.O. 8-61M-118260 PROCESSED RR

1

DATE

PAGE

June 2008

SGS NA Minerals Port of Portland - Terminal 5 Portland, Oregon

PHOTOGRAPH LOG



Photo 3 Conveyor 16 Eugene Evett



7376 SW Durham Road Portland, Oregon 97224 W.O. 8-61M-118260
PROCESSED RR
DATE June 2008
PAGE 2

SGS NA Minerals Port of Portland - Terminal 5 Portland, Oregon

PHOTOGRAPH LOG



APPENDIX B

Laboratory Analysis Report



Health, Safety & Environmental Services

Laboratory Analysis Report

Industrial Hygiene Laboratory 95 Oakwood Road Lake Zurich, IL 60047 Phone (847) 726-3320 Fax (847) 726-3323 Toll Free (888) 576-7522

ROB ROLOSON

TO:

AMEC EARTH AND ENVIRONMENTAL

7376 SW DURHAM ROAD PORTLAND, OR 97224

USA

REPORT DATE

MAY_21,__2008___

SAMPLES REC'D

_MAY_19, 2008_

REQUEST NUMBER

519155___

PAGE NUMBER

___1_OF 4

SAMPLE	AIR VOLUME / ANALYSIS REQUESTED	MEDIA TYPE	/ RESULTS	ANALYZE	D DATE
27039736	206 Liters	37mm 0.8 Micron Matched Mixe	ed Cellulose	MAY 21,	2008
		Micrograms	_	rams/Cubic	Meter
	TOTAL DUST	110	0.53		
7039727	30 Liters	37mm 0.8 Micron Matched Mixe	ed Cellulose	MAY 21,	2008
	N N	Ester Filter			
		Micrograms	~	rams/Cubic	Meter
	TOTAL DUST	< 100	< 3.3		
7039737	400 Liters	37mm 0.8 Micron Matched Mixe	ed Cellulose	MAY 21,	2008
		Ester Filter			
		Micrograms	Millign	cams/Cubic	Meter
	TOTAL DUST	4380	11		
7059549	18 Liters	37mm 0.8 Micron Matched Mixe	ed Cellulose	MAY 21,	2008
		Ester Filter			
		Micrograms	Millig	cams/Cubic	Meter
	TOTAL DUST	< 100	< 5.6		

COMMENTS:

IF PRESENT, DE MEANS DESORPTION EFFICIENCY

Respectfully submitted,

Um M. Will

William M. Walsh, CIH, ROH

Vice President, Laboratory Services



Health, Safety & Environmental Services

Laboratory Analysis Report

Industrial Hygiene Laboratory 95 Oakwood Road Lake Zurich, IL 60047 Phone (847) 726-3320 Fax (847) 726-3323 Toll Free (888) 576-7522

ROB ROLOSON

TO:

AMEC EARTH AND ENVIRONMENTAL

7376 SW DURHAM ROAD PORTLAND, OR 97224

USA

REPORT DATE

_MAY_21,_2008___

SAMPLES REC'D

_MAY_19,_2008___

REQUEST NUMBER

__519155____

PAGE NUMBER

2 OF 4____

SAMPLE	AIR VOLUME / ANALYSIS REQUESTED	MEDIA TYPE	RESULTS	ANALYZED DATE
27059551	COMMENT (BLANK)	37mm 0.8 Micron Matched Ester Filter ACCEPTABLE		MAY 21, 2008

COMMENTS:

IF PRESENT, DE MEANS DESORPTION EFFICIENCY

Respectfully submitted,

Win M. Will

William M. Walsh, CIH, ROH

Vice President, Laboratory Services



Health, Safety & Environmental Services

Industrial Hygiene Laboratory

95 Oakwood Road Lake Zurich, IL 60047 Phone (847) 726-3320 Fax (847) 726-3323 Toll Free (888) 576-7522

ROB ROLOSON

TO:

AMEC EARTH AND ENVIRONMENTAL

7376 SW DURHAM ROAD PORTLAND, OR 97224

USA

REPORT DATE

_MAY_21,_2008___

SAMPLES REC'D

MAY 19, 2008

REQUEST NUMBER

__519155___

PAGE NUMBER

3 OF 4__ _

REPORTING LIMIT	ANALYSIS REQUESTED	METHODOLOGY	CAS #
100 Micrograms	TOTAL DUST	MODIFIED NIOSH 0500	
	WMM	GRAVIMETRIC ANALYSIS	
		i	
į			
i			
	<u></u>		

COMMENTS:

- * CONCENTRATION CALCULATED USING AIR VOLUMES SUPPLIED BY CLIENT
- * UNLESS OTHERWISE NOTED, SAMPLES RECEIVED IN GOOD CONDITION
- * MODIFICATIONS MAY BE MADE TO ABOVE METHODS TO OPTIMIZE RESULTS (AVAILABLE UPON REQUEST)
- * RESULTS ARE STRICTLY LIMITED TO SAMPLES ANALYZED

Respectfully submitted,

Wan M. Will

William M. Walsh, CIH, ROH

Vice President, Laboratory Services



Health, Safety & Environmental Services

Industrial Hygiene Laboratory

95 Oakwood Road Lake Zurich, IL 60047 Phone (847) 726-3320 Fax (847) 726-3323 Toll Free (888) 576-7522

TC	١.

ROB ROLOSON

AMEC EARTH AND ENVIRONMENTAL 7376 SW DURHAM ROAD PORTLAND, OR 97224

USA

REPORT DATE

MAY 21, 2008___

SAMPLES REC'D

MAY 19, 2008_

REQUEST NUMBER

519155

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4 OF 4

	PAGE NUMBER 4 OF 4
REQUEST LAB COMMENTS:	
	UNLESS OTHERWISE NOTED, ALL QC CRITERIA WERE MET.

Respectfully submitted,

Win M. Will

William M. Walsh, CIH, ROH

Vice President, Laboratory Services

PORTLAND BULK TERMINAL 5 DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches	Clear of	Water	pooled	Pond C	lear of	Water	· level	Water	Around	Dock S	Surface	Comments
				Debris, B	lockage,	at the	culvert	Debris, B	lockage,	above		l	Free of	i	Excessive	Describe any corrections taken
			Product	Floating	g Solids	unde	r C7?	Floating	Solids	we	ir?	Floating	g Solids	Product :	Spillage ?	and the date of completion
D-4-	11111	347 11		& Oily S				& Oily S					Sheen?	ļ	ı	
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	WH	Closely	GSIS	/			/				/			/		
17	MH	Clear	FITA													
18	MM		alle				/		-		/	1				
19	mH	Othory	Flor					/								
20	BM	Dean	NIA	_/			/									
21	gm	Pain	NIA										/			
22	M H	Dorly	NIA	_/			/	/								
23	mH	Clear	12II											(
24	MH	Shown	71m										1	(
25	MM	Shoon	1000												-	
26	ym .	Clory	Flm	<i>ι</i> /									/	/		
27	KM	avoor	WSM				/	1			/		/	1		
28	M	Closly	CAIL										/_			
29	MA	Clay	faix					- (
30	MH	Clarely	75m	/			/	6			~	,				
31									$\langle \ \rangle$							
MAN	AGER SIGI	NATURÉ:	John (<u>L_</u>	DATE:	و	5/2	11)			•				

PORTLAND BULK TERMINAL 5 DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches	Clear of	Water	pooled	Pond C	Clear of	Water	·level	Water	Around	Dock S	Surface	Comments
l				Debris, B	lockage,	at the	culvert	Debris, E	Blockage,	abov	e the	Dock f	ree of	Free of E	xcessive	Describe any corrections taken
ŀ			Product	Floating	Solids	unde	r C7?	Floating	Solids	we	ir?	Floating	Solids	Product 9	Spillage ?	and the date of completion
		l		& Oily S				& Oily				& Oily				
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	MH	Clevy	RESS													
2	WH	Shage	i				/									
3	MH	Clary	4215	مست		_		/								
4	2m	Shaps	G5I5					/			/			/		
5	BM	D Cloaly	4114													
6	KM	Gowy	TEIR				/					/		/		
7	KM	40004	JGRO	/			/	/						/		
8	mH	Clon	Flor					/								
9	1	Clarry	7 Jan				/	/								
10	mH	Showas	74m	/			/				/					
11	Цm	Cloudy	7.11m	/			/					/				
12	dm	Clary	Alm.	/		_	/	1				/		/		
13	ym	Raina	41 II								1		-	/		
14	BM	Pain	科型										_			
15	MH	Pain	F2I5	/		/		1			/					

Routing:	Please check box when reviewed	Distribution:
	2. Terminal Manager	Original to File
	3. Assistant	Copy to Stormwater Report File

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Thursday, March 10, 2011

Katrina Greene Kinder Morgan Terminal 5 15550 N Lombard Portland, OR 97203

RE: Storm Water / Feb 2011

Enclosed are the results of analyses for work order <u>A11B365</u>, which was received by the laboratory on 2/28/2011 at 2:12:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: jhein@apex-labs.com, or by phone at 503-718-2323.

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jusi M Heir

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Storm Water

15550 N Lombard

Project Number: Feb 2011

Reported:

Portland, OR 97203

Project Manager: Katrina Greene

03/10/11 16:09

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION Sample ID Laboratory ID Matrix Date Sampled Date Received Feb Stormwater A11B365-01 Water 02/28/11 13:15 02/28/11 14:12

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Josie M Hein For Allison Greiner, Project Manager

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Storm Water

15550 N Lombard Portland, OR 97203 Project Number: Feb 2011 Project Manager: Katrina Greene Reported:

03/10/11 16:09

ANALYTICAL REPORT FOR SAMPLES

FIELD DATA (Provided by Client)

Lab Number	Sample Name	Field pH	pH Temp(C)
A11B365-01	Feb Stormwater	6.54	8.0

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Josie M Hein For Allison Greiner, Project Manager

Page 3 of 12

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Storm Water

15550 N Lombard

Project Number: Feb 2011

Reported:

Portland, OR 97203

Project Manager: Katrina Greene

03/10/11 16:09

ANALYTICAL SAMPLE RESULTS

	Total Metals by EPA 200.8 (ICPMS)											
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes				
Feb Stormwater (A11B365-01)			Matrix: Water		Batch: 11030	10						
Copper	ND		0.00400	mg/L	1	03/02/11 14:32	EPA 200.8					
Lead	ND		0.00100	11	n	**	н					
Zinc	0.0221		0.00400	11	**	Ħ	n					

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: Feb 2011

Project Manager: Katrina Greene

Reported:

03/10/11 16:09

ANALYTICAL SAMPLE RESULTS

	Conventional Chemistry Parameters										
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes			
Feb Stormwater (A11B365-01)	-		Matrix: Water		Batch: 110305	53					
HEM (Oil and Grease)	ND		4.67	mg/L	1	03/04/11 12:22	EPA 1664	O-01			
pH	7.39			pH Units	Ħ	03/01/11 10:28	EPA 150.1				
pH Temperature (deg C)	20.3			H	н	n	14				
Total Suspended Solids	8.00		5.00	mg/L	**	03/01/11 16:40	SM 2540 D				

Apex Laboratories

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Josie M Hein For Allison Greiner, Project Manager

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Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: Fcb 2011
Project Manager: Katrina Greene

Reported:

03/10/11 16:09

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)												
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1103010 - EPA 301	5A						Wat	ter				
Blank (1103010-BLK1)	•			Pro	epared: 03/	02/11 09:02	Analyzed:	03/02/11 1	3:11			
EPA 200.8												
Copper	ND		0.00400	mg/L	1							
Lead	ND		0.00100	**	*1							
Zinc	ND		0.00400	**	"							
LCS (1103010-BS1)				Pro	pared: 03/	02/11 09:02	Analyzed:	03/02/11 1	3:14			
EPA 200.8							'					
Copper	0.0557		0.00400	mg/L	1	0.0556		100	85-115%			
Lead	0.0558		0.00100	17	**	**		101	**			
Zinc	0.0565		0.00400	19	н	**		102	11			

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Josie M Hein For Allison Greiner, Project Manager

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: Feb 2011

Project Manager: Katrina Greene

Reported: 03/10/11 16:09

QUALITY CONTROL (QC) SAMPLE RESULTS

			Conve	ntional Ch	emistry	Paramete	rs					
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%RE	%REC C Limits	RPD	RPD Limit	Notes
Batch 1103006 - Method P	rep: Aq						Wate	r				
Reference (1103006-SRM1)				Pre	pared: 03/	01/11 09:44	Analyzed: 03	3/01/11	10:16			
EPA 150.1	****											
pH	7.94			pH Units	1	8.00		99	98.74-101.26%			
Reference (1103006-SRM2)				Pre	pared: 03/	01/11 09:44	Analyzed: 03	3/01/11	10:39			
EPA 150.1												
pH	2.08			pH Units	1	2.00		104	95-105%			
Reference (1103006-SRM3)				Pre	pared: 03/	01/11 15:00	Analyzed: 03	3/01/11	15:49			
EPA 150.1												
pH	5.98			pH Units	1	6.00		100	98.4-101.7%			
Reference (1103006-SRM4)				Prej	pared: 03/	01/11 15:00	Analyzed: 03	3/01/11	16:04			
EPA 150.1				, ,								
pH	7.94			pH Units	1	8.00		99	98.74-101.26%			
Reference (1103006-SRM5)				Prep	pared: 03/	01/11 15:00	Analyzed: 03	3/01/11	16:29			
EPA 150.1												
pН	5.99			pH Units	1	6.00		100	98.4-101.7%			

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Jasi M Neir

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Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: Feb 2011
Project Manager: Katrina Greene

Reported: 03/10/11 16:09

QUALITY CONTROL (QC) SAMPLE RESULTS

			Conve	ntional Cl	nemistry	Paramete	rs					
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1103007 - Total Su	spended So	lids					Wat	er				
Blank (1103007-BLK1)				Pro	pared: 03/	01/11 10:30	Analyzed:	03/01/11 14	:15			
SM 2540 D					-							
Total Suspended Solids	ND		5.00	mg/L	1							
Reference (1103007-SRM1)				Pro	pared: 03/	01/11 10:30	Analyzed: (03/01/11 16	:40			
SM 2540 D												
Total Suspended Solids	97.4			mg/L	1	96.6		101	90-110%			

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Josie M Hein For Allison Greiner, Project Manager

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203

Project: Storm Water

Project Number: Feb 2011 Project Manager: Katrina Greene

Reported:

03/10/11 16:09

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters												
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1103053 - EPA 1664							Wat	ter				
Blank (1103053-BLK1)				Pro	pared: 03/	03/11 08:27	Analyzed:	03/04/11 12	2:22			
EPA 1664												
HEM (Oil and Grease)	ND		5.00	mg/L	1							
LCS (1103053-BS1)				Pro	pared: 03/	03/11 08:27	Analyzed:	03/04/11 12	2:22			
EPA 1664												
HEM (Oil and Grease)	37.4			mg/L	1	40.0		94	78-114%			

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Josie M Hein For Allison Greiner, Project Manager

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Kinder Morgan Terminal 5

Project: Storm Water

15550 N Lombard Portland, OR 97203 Project Number: Feb 2011

Project Manager: Katrina Greene

Reported: 03/10/11 16:09

SAMPLE PREPARATION INFORMATION

			Total Metals by EP	A 200.8 (ICPMS)		·	
Prep: EPA 3015A					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1103010 A11B365-01	Water	EPA 200.8	02/28/11 13:15	03/02/11 09:02	45mL/50mL	45mL/50mL	1.00
			Conventional Chen	nistry Parameters			
Prep: EPA 1664	·				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1103053							
A11B365-01	Water	EPA 1664	02/28/11 13:15	03/03/11 08:27	1N/A/1N/A	1N/A/1mL	NA
Prep: Method Prep	o: Aq				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1103006							
A11B365-01	Water	EPA 150.1	02/28/11 13:15	03/01/11 09:44	20mL/20mL	20mL/20mL	NA
Prep: Total Suspe	nded Solids	i			Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1103007							
A11B365-01	Water	SM 2540 D	02/28/11 13:15	03/01/11 10:30	1N/A/1N/A	1N/A/1mL	NA

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Kinder Morgan Terminal 5

Project: Storm Water

15550 N Lombard

Project Number: Feb 2011

Portland, OR 97203

Project Manager: Katrina Greene

Reported: 03/10/11 16:09

Notes and Definitions

Qualifiers:

O-01

Result for total Hexane Extractable Material (HEM) is below reporting level for this sample. Silica Gel Treatment (HEM-SGT) analysis was therefore not performed.

Notes and Conventions:

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.

RPD Relative Percent Difference

MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.

WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.

Batch QC

Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Blank Policy Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.

For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.

Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.

*** Used to indicate a possible discrepency with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Jasi M Heir

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

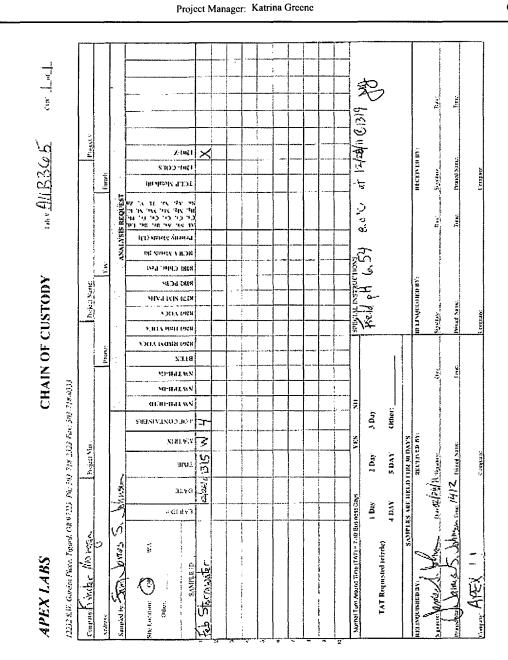
Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: Feb 2011

Reported:

03/10/11 16:09



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Jasi MT Veir

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Monday, December 20, 2010

Katrina Greene Kinder Morgan Terminal 5 15550 N Lombard Portland, OR 97203

RE: Storm Water / December 2010

Enclosed are the results of analyses for work order <u>A10L115</u>, which was received by the laboratory on 12/8/2010 at 1:13:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: AGreiner@Apex-Labs.com, or by phone at 503-718-2323.

Apex Laboratories

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Allison Greiner, Project Manager

Page 1 of 10

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Storm Water

15550 N Lombard Portland, OR 97203 Project Number: December 2010 Project Manager: Katrina Greene

Reported: 12/20/10 14:19

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION Sample ID Laboratory ID Matrix Date Sampled Date Received Dec. Stormwater A10L115-01 Water 12/08/10 09:58 12/08/10 13:13

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Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: December 2010 Project Manager: Katrina Greene

Reported:

12/20/10 14:19

ANALYTICAL SAMPLE RESULTS

	Total Metals by EPA 200.7 (ICP-AES)													
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes						
Dec. Stormwater (A10L115-01)			Matrix: Water		Batch: 10121	58								
Copper	ND		0.0200	mg/L	1	12/14/10 17:22	EPA 200.7							
Lead	0.0297		0.0100	n	n	**	u							
Zinc	0.110		0.0100	**	11	н	"							

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Allison Greiner, Project Manager

Page 3 of 10

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Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: December 2010 Project Manager: Katrina Greene

Reported: 12/20/10 14:19

ANALYTICAL SAMPLE RESULTS

		Cor	ventional Cher	nistry Par	rameters			
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Dec. Stormwater (A10L115-01)			Matrix: Water		Batch: 101211	12	. 38,890	
pH	7.33			pH Units	ı	12/08/10 13:42	EPA 150.1	
pH Temperature (deg C)	16.9			*1	n	11	n	
Total Suspended Solids	10.0		5.00	mg/L	"	12/09/10 14:00	SM 2540 D	

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Allison Greiner, Project Manager

Page 4 of 10

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Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: December 2010 Project Manager: Katrina Greene

Reported:

12/20/10 14:19

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.7 (ICP-AES)												
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1012158 - EPA 3015A			<u></u>		<u>-</u>		Wat	ter				
Blank (1012158-BLK1)				Pro	epared: 12/	10/10 12:01	Analyzed:	12/14/10 1	5:47			
EPA 200.7												
Copper	ND		0.0200	mg/L	1							
Lead	ND		0.0100	"	*1							
Zinc	ND		0.0100	**	"							
LCS (1012158-BS1)				Pro	epared: 12/	10/10 12:01	Analyzed:	12/14/10 1	5:50			
EPA 200.7												
Copper	0.509		0.0200	mg/L	1	0.556		92	85-115%			
Lead	0.492		0.0100	11	н	*1		88	"			
Zinc	0.535		0.0100	11	19	11		96	**			

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Allison Greiner, Project Manager

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Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: December 2010 Project Manager: Katrina Greene

Reported:

12/20/10 14:19

QUALITY CONTROL (QC) SAMPLE RESULTS

			Conve	entional Ch	emistry	Paramete	ers					
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1012112 - Method P	rep: Aq				_		Wat	er				
Reference (1012112-SRM1)				Prej	pared: 12/	08/10 11:13	Analyzed:	12/08/10	11:30			
EPA 150.1												
pН	6.04			pH Units	1	6.00		101	98.4-101.7%			
Reference (1012112-SRM2)				Prej	pared: 12/	08/10 11:13	Analyzed:	12/08/10	11:54			
EPA 150.1										,		
pH	7.97			pH Units	1	8.00		100 3	8.74-101.269	%		
Reference (1012112-SRM3)				Prej	pared: 12/	08/10 11:13	Analyzed:	12/08/10	12:02			
EPA 150.1												
pН	6.05			pH Units	1	6.00		101	98.4-101.7%	,		
Reference (1012112-SRM4)				Prej	pared: 12/	08/10 11:13	Analyzed:	12/08/10	13:17			
EPA 150.1												
рН	7.94	***		pH Units	I	8.00		99 3	8.74-101.269	%		
Reference (1012112-SRM5)				Prej	pared: 12/	08/10 11:13	Analyzed:	12/08/10	13:31			
EPA 150.1				.,								
рH	6.01			pH Units	1	6.00		100	98.4-101.7%			
Reference (1012112-SRM6)				Prej	pared: 12/	08/10 11:13	Analyzed:	12/08/10	13:43			
EPA 150.1												
pH	7.94			pH Units	1	8.00		99 3	8.74-101.26	%		

Anex	Laborato	ries

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Allison Greiner, Project Manager

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Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: December 2010 Project Manager: Katrina Greene

Reported: 12/20/10 14:19

QUALITY CONTROL (QC) SAMPLE RESULTS

			Conve	ntional Cl	hemistry	Paramete	rs					
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1012132 - Total Sus	spended So	lids					Wat	ter				
Blank (1012132-BLK1)				Pro	pared: 12	09/10 10:15	Analyzed:	12/09/10 12	2:30			
SM 2540 D												
Total Suspended Solids	ND		5.00	mg/L	1							B-02
Reference (1012132-SRM1)				Pro	pared: 12	09/10 10:15	Analyzed:	12/09/10 14	:00			
SM 2540 D									- ***			
Total Suspended Solids	92.0			mg/L	1	96.6		95	90-110%			

Apex Laboratories

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Allison Greiner, Project Manager

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Storm Water 15550 N Lombard

Portland, OR 97203

Project Number: December 2010 Project Manager: Katrina Greene

Reported: 12/20/10 14:19

SAMPLE PREPARATION INFORMATION

			Total Metals by EPA	\ 200.7 (ICP-AES)			
Prep: EPA 3015A					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1012158							
A10L115-01	Water	EPA 200.7	12/08/10 09:58	12/10/10 12:01	45mL/50mL	45mL/50mL	1.00
			Conventional Chem	istry Parameters			
Prep: Method Prep	o: A q				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1012112							
A10L115-01	Water	EPA 150.1	12/08/10 09:58	12/08/10 11:13	20mL/20mL	20mL/20mL	NA
Prep: Total Suspe	nded Solids				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1012132							
A10L115-01	Water	SM 2540 D	12/08/10 09:58	12/09/10 10:15	1N/A/1N/A	1N/A/1mL	NA

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Allison Greiner, Project Manager

Page 8 of 10

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Storm Water

15550 N Lombard

Project Number: December 2010

Reported:

Portland, OR 97203

Project Manager: Katrina Greene

12/20/10 14:19

Notes and Definitions

Qualifiers:

B-02

Analyte detected in an associated blank at a level between one-half the MRL and the MRL. (See Notes and Conventions below.)

Notes and Conventions:

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.

RPD Relative Percent Difference

MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.

WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.

Batch QC Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Blank Policy Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.

For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.

Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

Apex Laboratories

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Allison Greiner, Project Manager

Page 9 of 10

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: December 2010

Reported: Project Manager: Katrina Greene

12/20/10 14:19

70 Tan					Prickly And Police	[10]
IN RIOURS	Projection	Zouik	REQUEST	1700°X 1700°C (1700°C ACT'D 2000°C (1800°C) 110° 200° 200° 200° 200° 200° 200° 200°	WETHERS 4 12.17 C - TO Changed quickly Mad to stabilize -> Deliter: sasay. 2/08/10@[16] [0]2015 Seg. 12/08/10 [0]2015 But. HETTERDING	Praid N226
	Pright Name	276	SIST SES	SEDESIA SARA AND CHADA POL MAIN CHADA POL AND SARA CHADA CA,	Fred pH = 7.28 (2.170 pt back to 12.015 pt back lotals & 12.02/12	T. 23.5.
CHAIN OF CUSTODY		Photog		8780 AGU./ 8790 HUDO AGU? 8790 HUBDI ADC./ 8777 AGU. 8777 AGU. 8777 AGU.		Tite
O O	Property Mgs.			AVERTHER STATES AND ST	1.00 Ray Park 1.00 Ray 1.00 R	No. 1 mal 312 Personal Name.
APEX LABS CHA	Contain Andel Magin	Assista	Sampled to Japan S. Jaking	Sin Leading (A) A.A. (B) Sin Leading (B) A.A. (B) Sin Leading	Man Assertal Israes (1873)	الراق . مبايلا (ق)

Apex Laboratories

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Allison Greiner, Project Manager

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SPL Inc. 8880 Interchange Drive Houston, TX 77054

Phone: (713) 660-0901 Fax: (713) 660-8975

Certificate of Analysis

December 17, 2010

Workorder: H10120223

Allison Greiner APEX Laboratories 12232 SW Garden Place Portland, OR 97223 Project: A10L115

Project Number: A10L115

Site: Tigard, OR

PO Number:

NELAC Cert. No.: T104704205-09-3

This Report Contains A Total Of 10 Pages

Excluding Any Attachments

Report ID: H10120223_6372

Printed: 12/17/2010 16:55

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Phone: (713) 660-0901 Fax: (713) 660-8975

Certificate of Analysis

December 17, 2010

Workorder: H10120223

Allison Greiner APEX Laboratories 12232 SW Garden Place Portland, OR 97223 Project: A10L115

Project Number: A10L115

Site: Tigard, OR

PO Number:

NELAC Cert. No.: T104704205-09-3

I. SAMPLE RECEIPT:

All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

II: ANALYSES AND EXCEPTIONS:

There were no exceptions noted.

III. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report (" mg\kg-dry " or " ug\kg-dry ").

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Report ID: H10120223 6372

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Phone: (713) 660-0901 Fax: (713) 660-8975

Certificate of Analysis

December 17, 2010

Workorder: H10120223

Allison Greiner APEX Laboratories 12232 SW Garden Place Portland, OR 97223 Project: A10L115

Project Number: A10L115

Site: Tigard, OR PO Number:

NELAC Cert. No.: T104704205-09-3

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or by his designee, as verified by the following signature.

Erica Cardenas, Senior Project Manager

Enclosures

Report ID: H10120223_6372



Phone: (713) 660-0901 Fax: (713) 660-8975

SAMPLE SUMMARY

Workorder: H10120223: A10L115

Project Number: A10L115

Lab ID	Sample ID	Matrix	Matrix COC ID		Date/Time Received
H10120223001	Dec. Stormwater	Water		12/8/2010 09:58	12/10/2010 09:30

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Phone: (713) 660-0901 Fax: (713) 660-8975

ANALYTICAL RESULTS

Workorder: H10120223 : A10L115

Project Number: A10L115

Lab ID:

H10120223001

Date/Time Received: 12/10/2010 09:30

Water

Matrix:

Sample ID: Dec. Stormwater

Date/Time Collected: 12/8/2010 09:58

WET CHEMISTRY

Analysis Desc: EPA 1664A

Analytical Batches:

Batch: 1616 EPA 1664A on 12/16/2010 09:30 by EAG

Parameters	Results mg/I Qual	Report Limit	MDL	DF	RegLmt	Batch In Prep	formation Analysis
Hexane Ext. Material (HEM)	ND	5.00	1.31	1			1616
Hexane Ext. Material (HEM-SGT)	ND	5.00	0.923	1			1616

Report ID: H10120223_6372



Phone: (713) 660-0901 Fax: (713) 660-8975

QUALITY CONTROL DATA

Workorder: H10120223: A10L115

Project Number: A10L115

QC Batch:

OG/1616

Analysis Method:

EPA 1664A

QC Batch Method:

Parameter

EPA 1664A

H10120218001

H10120223001

H10120299001

H10120224002 H10120224001

H10120225001

Associated Lab Samples:

H10120291001 H10120297001 H10120222001 H10120293001 H10120292001

H10120294001 H10120300001

H10120296001 H10120300002 H10120296002 H10120323003

METHOD BLANK: 86542

Analysis Date/Time Analyst:

12/16/2010 09:30 EAG

H10120298001

Blank

Reporting Limit

Hexane Ext. Material (HEM) Hexane Ext. Material (HEM-SGT)

mg/l mg/l

Units

ND ND 5.00 5.00

LCSD

98.0

86.5

LABORATORY CONTROL SAMPLE & LCSD:

86543

40

20

86544

Result Qualifiers

LCS Analysis Date/Time Analyst: 12/16/2010 09:30 EAG

LCSD Analysis Date/Time

12/16/2010 09:30 EAG

Parameter Hexane Ext. Material (HEM) Hexane Ext. Material (HEM-SGT)

Spike Units Conc.

mg/l

mg/l

Result 39.6 18.1

LCS

Result % Rec 39.2 99.0

LCS

90.5

% Rec Limit

% Rec

78-114

64-132

RPD 1.0

4.5

RPD 18 34

Max

MATRIX SPIKE SAMPLE: 86545

Original: H10120218001

LCSD

17.3

Parameter	Units	Original Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits
Hexane Ext. Material (HEM)	mg/l	ND	40	40.1	87.6	78-114
Hexane Ext. Material (HEM- SGT)	mg/l	ND	20	16.06	69.1	64-132

QC results presented in the QC Control Data have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules. Also, MS/MSD % recoveries are calculated by the SPL LIMS using any detected value greater than the MDL.

Report ID: H10120223_6372

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Phone: (713) 660-0901 Fax: (713) 660-8975

Legend

(S) - Indicates analyte is a surrogate

Qualifier	Qualifier Description
*	Recovery/RPD value outside QC limits
+	DCS Concentration
В	Analyte detected in the Method Blank
С	MTBE results were not confirmed by GCMS
D	Recovery out of range due to dilution
E	Results exceed calibration range
Н	Exceeds holding time
1	Estimated value, between MDL and PQL (Florida)
J	Estimated value
JN	The analysis indicates the presence of an analyte
MI	Matrix Interference
N	Recovery outside of control limits
NC	Not Calculable (Sample Duplicate)
NC	Not Calculated - Sample concentration > 4 times the spike
ND	Not Detected at reporting Limits
Р	Pesticide dual column results, greater then 25%
Q	Received past holding time
TNTC	Too numerous to count
U	Not Detected at reporting Limits

Report ID: H10120223_6372



Phone: (713) 660-0901 Fax: (713) 660-8975

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: H10120223 : A10L115

Project Number: A10L115

Lab ID Sample ID QC Batch Method QC Batch Analytical Method Batch

H10120223001 Dec. Stormwater EPA 1664A OG/1616

Report ID: H10120223_6372



Phone: (713) 660-0901 Fax: (713) 660-8975

Sample Receipt Checklist

Received By LOG WorkOrder: H10120223 **UPS** 12/10/2010 09:30 Carrier Name: Date and Time Water Ice Chilled By: 4.0°C Temperature: YES Shipping container/cooler in good condition? Not Present Custody seals intact on shipping container/cooler? Custody seals intact on sample bottles? Not Present YES Chain of custody present? YES Chain of custody signed when relinquished and received? YES Chain of custody agrees with sample labels? Samples in proper container/bottle? YES YES Samples containers intact? Sufficient sample volume for indicated test? YES YES 10. All samples received within holding time? YES 11. Container/Temp Blank temperature in compliance? 12. Water - VOA vials have zero headspace? VOA Vials Not Present Not Applicable 13. Water - Preservation checked upon receipt(except VOA*)? *VOA Preservation Checked After Sample Analysis SPL Representative: Contact Date & Time:

Report ID: H10120223_6372

Client Name Contacted: Client Instructions:

SUBCONTRACT ORDER Apex Laboratories

A10L115

H10120223

SENDING LABORATORY:

Apex Laboratories 12232 S.W. Garden Place Tigard, OR 97223 Phone: (503) 718-2323 Fax: (503) 718-0333

Project Manager: Allison Greiner

RECEIVING LABORATORY:

SPL, Inc Houston 8880 Interchange Dr. Houston, TX 77054 Phone :(800) 969-6775 Fax: (713) 660-8975

Sample Name: Dec. Stormwater		Water Sar	mpled: 12/08/10 09:58	(A10L115-01)
Analysis	Due	Expires	Comments	
1664 HEM Subanalysis	12/22/10 17:00	01/05/11 09:58		
1664 SGT-HEM Subanalysis	12/22/10 17:00	01/05/11 09:58		
Containers Supplied:				
(A)I L Amber Glass - HCL				
(B)1 L Amber Glass - HCL				

Standard turn

Federal Express (Shipper)

Date

Released By

Federal Express (Shipper) Date Received By 12/10/100930

Page 1 of 1

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Wednesday, December 1, 2010

Katrina Greene Kinder Morgan Terminal 5 15550 N Lombard Portland, OR 97203

RE: Storm Water / November 2010

Enclosed are the results of analyses for work order <u>A10K275</u>, which was received by the laboratory on 11/17/2010 at 5:52:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: <u>AGreiner@Apex-Labs.com</u>, or by phone at 503-718-2323.

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Allison Greiner, Project Manager

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: November 2010 Project Manager: Katrina Greene Reported:

12/01/10 17:21

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION										
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received						
Stormwater	A10K275-01	Water	11/17/10 15:47	11/17/10 17:52						

Apex Laboratories

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Allison Greiner, Project Manager

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: November 2010 Project Manager: Katrina Greene Reported:

12/01/10 17:21

ANALYTICAL REPORT FOR SAMPLES

FIELD DATA (Provided by Client)

Lab Number	Sample Name	Field pH	pH Temp(C)
A10K275-01	Stormwater	7.26	12.4

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Allison Greiner, Project Manager

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: November 2010 Project Manager: Katrina Greene

Reported: 12/01/10 17:21

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 200.7 (ICP-AES)											
Reporting Analyte Result MDL Limit Units Dilution Date Analyzed Method Notes											
Stormwater (A10K275-01)			Matrix: Water		Batch: 101150)2					
Copper	ND		0.0100	mg/L	1	12/01/10 11:06	EPA 200.7				
Lead	ND		0.0100	"	"	11	ti				
Zinc	ND		0.0100	n	n	11	n				

Apex Laboratories

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Allison Greiner, Project Manager

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: November 2010 Project Manager: Katrina Greene Reported: 12/01/10 17:21

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters											
Reporting Analyte Result MDL Limit Units Dilution Date Analyzed Method Notes											
Stormwater (A10K275-01)			Matrix: Water		Batch: 101135	57					
рН	7.04			pH Units	1	11/18/10 10:19	EPA 150.1				
pH Temperature (deg C)	14.0			**	n	n	Ħ				
Total Suspended Solids	7.00		5.00	mg/L	11	11/18/10 16:26	SM 2540 D				

Apex Laboratories

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Allison Greiner, Project Manager

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: November 2010 Project Manager: Katrina Greene Reported: 12/01/10 17:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.7 (ICP-AES)												
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1011502 - EPA 3015A	١						Wat	ter				
Blank (1011502-BLK1)				Pro	epared: 11/	24/10 11:42	Analyzed:	12/01/10 1	0:48			
EPA 200.7												
Copper	ND		0.0100	mg/L	1				'			
Lcad	ND		0.0100	**	11							
Zinc	ND		0.0100	"	"						•••	
LCS (1011502-BS1)				Pro	epared: 11/	24/10 11:42	Analyzed:	12/01/10 1	0:51			
EPA 200.7												
Copper	0.0548		0.0100	mg/L	1	0.0556		99	85-115%			
Lead	0.0621		0.0100	"	"	11		112	**			
Zinc	0.0484		0.0100	n	**	n		87				

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Allison Greiner, Project Manager

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: November 2010 Project Manager: Katrina Greene Reported: 12/01/10 17:21

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters												
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1011357 - Method P	rep: Aq						Wat	er				
Duplicate (1011357-DUP1)				Pre	pared: 11/	18/10 09:49	Analyzed:	11/18/10	10:20			
QC Source Sample: Stormwater (A	A10K275-01)											
EPA 150.1												
pН	7.08			pH Units	1		7.04			0.6	10%	
pH Temperature (deg C)	14.0			"	"		14.0			0	30%	
Reference (1011357-SRM1)				Pre	pared: 11/	18/10 09:49	Analyzed:	11/18/10	10:15			
EPA 150.1												
pH	6.02			pH Units	1	6.00		100	98.4-101.7%			
Reference (1011357-SRM2)				Prej	pared: 11/	18/10 09:49	Analyzed:	11/18/10	10:21			
EPA 150.1												
pH	7.91			pH Units	1	8.00		99 9	8.74-101.26%	·		
Reference (1011357-SRM3)				Prej	pared: 11/	18/10 09:49	Analyzed:	11/18/10	11:04			
EPA 150.1												
рН	6.02			pH Units	i	6.00		100	98.4-101.7%			
Reference (1011357-SRM4)				Prej	pared: 11/	18/10 09:49	Analyzed:	11/18/10	11:09			
EPA 150.1												
pН	7.92			pH Units	ì	8.00		99 9	8.74-101.26%	(
Reference (1011357-SRM5)				Prep	oared: 11/	18/10 09:49	Analyzed:	11/18/10	17:04			
EPA 150.1												
pH	6.03			pH Units	1	6.00		100	98.4-101.7%			
Reference (1011357-SRM6)				Prej	oared: 11/	18/10 09:49	Analyzed:	11/18/10	17:20			
EPA 150.1	***************************************								·			
pН	7.92			pH Units	ì	8.00		99 9	8.74-101.26%	{		

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Allison Greiner, Project Manager

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: November 2010 Project Manager: Katrina Greene

Reported: 12/01/10 17:21

QUALITY CONTROL (QC) SAMPLE RESULTS

			Conve	ntional Cl	hemistry	Paramete	rs				
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD Limit	Notes
Batch 1011360 - Total Sus	pended Sc	lids					Wat	ter			
Blank (1011360-BLK1)				Pre	epared: 11/	18/10 10:33	Analyzed:	11/18/10 14	1:26		
SM 2540 D											
Total Suspended Solids	ND		5.00	mg/L	1					 	
Reference (1011360-SRM1)				Pro	epared: 11/	18/10 10:33	Analyzed:	11/18/10 10	5:26		
SM 2540 D											
Total Suspended Solids	100			mg/L	1	96.6		104	90-110%	 	

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Allison Greiner, Project Manager

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: November 2010 Project Manager: Katrina Greene

Reported: 12/01/10 17:21

SAMPLE PREPARATION INFORMATION

			Total Metals by EPA	\ 200.7 (ICP-AES)			
Prep: EPA 3015A					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1011502							
A10K275-01	Water	EPA 200.7	11/17/10 15:47	11/24/10 11:42	45mL/50mL	45mL/50mL	1.00
	<u> </u>		Conventional Chem	nistry Parameters			
Prep: Method Prep	o: Aq				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1011357							
A10K275-01	Water	EPA 150.1	11/17/10 15:47	11/18/10 09:49	20mL/20mL	20mL/20mL	NA
Prep: Total Suspe	nded Solids				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1011360		~~~~					
A10K275-01	Water	SM 2540 D	11/17/10 15:47	11/18/10 10:33	1N/A/1N/A	1N/A/1mL	NA

Apex Laboratories

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Allison Greiner, Project Manager

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Storm Water

15550 N Lombard Portland, OR 97203 Project Number: November 2010

Project Manager: Katrina Greene

Reported: 12/01/10 17:21

Notes and Definitions

Qualifiers:

Notes and Conventions:

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.

RPD Relative Percent Difference

MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.

WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.

Batch QC Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Blank Policy Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.

For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.

Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Allison Greiner, Project Manager

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: November 2010 Project Manager: Katrina Greene Reported:

12/01/10 17:21

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abora	tories
	Labora

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Allison Greiner, Project Manager

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Phone: (713) 660-0901 Fax: (713) 660-8975

Certificate of Analysis

November 30, 2010

Workorder: H10110538

Allison Greiner APEX Laboratories 12232 SW Garden Place Portland, OR 97223 Project: A10K275

Project Number:

Site: Tigard, OR

PO Number:

NELAC Cert. No.: T104704205-09-3

This Report Contains A Total Of 9 Pages

Excluding Any Attachments

Report ID: H10110538_6372

Printed: 11/30/2010 14:15



Phone: (713) 660-0901 Fax: (713) 660-8975

Certificate of Analysis

November 30, 2010

Workorder: H10110538

Allison Greiner APEX Laboratories 12232 SW Garden Place Portland, OR 97223 Project: A10K275

Project Number: Site: Tigard, OR

PO Number:

NELAC Cert. No.: T104704205-09-3

I. SAMPLE RECEIPT:

All samples were received intact. The internal ice chest temperatures were measured on receipt and are recorded on the attached Sample Receipt Checklist.

II: ANALYSES AND EXCEPTIONS:

There were no exceptions noted.

III. GENERAL REPORTING COMMENTS:

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Some of the percent recoveries and RPD's on the QC report for the MS/MSD may be different than the calculated recoveries and RPD's using the sample result and the MS/MSD results that appear on the report because, the actual raw result is used to perform the calculations for percent recovery and RPD.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or by his designee, as verified by the following signature.

C. Raduy

Alisha Rodriguez, Senior Project Manager

Enclosures

Report ID: H10110538 6372

Printed: 11/30/2010 14:15

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Phone: (713) 660-0901 Fax: (713) 660-8975

SAMPLE SUMMARY

Workorder: H10110538 : A10K275

Project Number:

Lab ID	Sample ID	Matrix	COC ID	Date/Time Collected	Date/Time Received
H10110538001	NOV. STORMWATER	Water		11/17/2010 15:47	11/20/2010 09:08

Report ID: H10110538_6372

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Phone: (713) 660-0901 Fax: (713) 660-8975

ANALYTICAL RESULTS

Workorder: H10110538 : A10K275

Project Number:

Lab ID:

H10110538001

Date/Time Received: 11/20/2010 09:08

Matrix:

Water

Sample ID: NOV. STORMWATER

Date/Time Collected: 11/17/2010 15:47

WET CHEMISTRY

Analysis Desc: EPA 1664A

Analytical Batches:

Batch: 1591 EPA 1664A on 11/23/2010 10:30 by EAG

Parameters	Results mg/I Qual	Report Limit	MDL	DF	RegLmt	Batch Information Prep Analysis
Hexane Ext. Material (HEM)	ND	5.00	1.31	1		1591
Hexane Ext. Material (HEM-SGT)	ND	5.00	0.923	1		1591

Report ID: H10110538_6372

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Phone: (713) 660-0901 Fax: (713) 660-8975

QUALITY CONTROL DATA

Workorder: H10110538: A10K275

Project Number:

QC Batch:

OG/1591

Analysis Method:

EPA 1664A

QC Batch Method:

EPA 1664A

H10110361001

H10110377001

H10110407001

H10110407002

H10110410002

Associated Lab Samples:

H10110360002 H10110453001 H10110541001

H10110454001 H10110541002 H10110538001 H10110542001 H10110539001 H10110543001 H10110539002 H10110543002 H10110540001 H10110569003

METHOD BLANK: 83322

Analysis Date/Time Analyst:

Hexane Ext. Material (HEM)

11/23/2010 10:30 EAG

Parameter

Hexane Ext. Material (HEM-SGT)

Units mg/l

mg/l

Blank Result Qualifiers

ND

Reporting Limit

ND

5.00 5.00

LABORATORY CONTROL SAMPLE & LCSD:

83323

Spike

20

83324

LCS Analysis Date/Time Analyst: 11/23/2010 10:30 EAG

LCSD Analysis Date/Time

11/23/2010 10:30 EAG

Parameter Hexane Ext. Material (HEM) Hexane Ext. Material (HEM-SGT) Units mg/l

mg/l

Conc. Result 40 38.7

Original

Result

LCS

15.8

Result % Rec 38.1 96.8 79.0 16.3

LCS

% Rec 95.2 81.5

LCSD

78-114 64-132

% Rec

Limit

1.6 3.1

RPD

RPD 18 34

Max

MATRIX SPIKE SAMPLE: 83325

Original: H10110569003

Spike

Conc.

LCSD

Parameter Units Hexane Ext. Material (HEM) mg/l Hexane Ext. Material (HEMmg/l

ND ND 40 20

39.8 16.57

Result

MS

96.5 82.0

% Rec

MS

78-114 64-132

% Rec

Limits

QC results presented in the QC Control Data have been rounded. RPD and percent recovery values calculated by the SPL LIMS system are derived from QC data prior to the application of rounding rules. Also, MS/MSD % recoveries are calculated by the SPL LIMS using any detected value greater than the MDL.

Report ID: H10110538_6372

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Printed:

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Legend

(S) - Indicates analyte is a surrogate

Qualifier	Qualifier Description
*	Recovery/RPD value outside QC limits
+	DCS Concentration
В	Analyte detected in the Method Blank
С	MTBE results were not confirmed by GCMS
D	Recovery out of range due to dilution
Е	Results exceed calibration range
Н	Exceeds holding time
1	Estimated value, between MDL and PQL (Florida)
J	Estimated value
JN	The analysis indicates the presence of an analyte
MI	Matrix Interference
N	Recovery outside of control limits
NC	Not Calculable (Sample Duplicate)
NC	Not Calculated - Sample concentration > 4 times the spike
ND	Not Detected at reporting Limits
Р	Pesticide dual column results, greater then 25%
Q	Received past holding time
TNTC	Too numerous to count
U	Not Detected at reporting Limits

Report ID: H10110538_6372

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: H10110538 : A10K275

Project Number:

Analytical Analytical Method QC Batch Analytical Method Batch

H10110538001

NOV. STORMWATER

EPA 1664A

OG/1591

Report ID: H10110538_6372

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Phone: (713) 660-0901 Fax: (713) 660-8975

Sample Receipt Checklist

WorkOrder: LOG H10110538 Received By **FEDEXS** Date and Time 11/20/2010 09:08 Carrier Name: Chilled By: Water Ice Temperature: 5.0°C Shipping container/cooler in good condition? YES Not Present Custody seals intact on shipping container/cooler? Not Present 3. Custody seals intact on sample bottles? Chain of custody present? YES Chain of custody signed when relinquished and received? YES YES Chain of custody agrees with sample labels? Samples in proper container/bottle? YES YES Samples containers intact? Sufficient sample volume for indicated test? YES 10. All samples received within holding time? YES 11. Container/Temp Blank temperature in compliance? YES **VOA Vials Not Present** 12. Water - VOA vials have zero headspace? 13. Water - Preservation checked upon receipt(except VOA*)? Not Applicable *VOA Preservation Checked After Sample Analysis

SPL Representative:

Contact Date & Time:

Client Name Contacted:

Client Instructions:

Report ID: H10110538_6372

Printed: 11/30/2010 14:15



Phone: (713) 660-0901 Fax: (713) 660-8975

SUBCONTRACT ORDER

Apex Laboratories
A10K275



SENDING LABORATORY:

Apex Laboratories 12232 S.W. Garden Place Tigard, OR 97223 Phone: (503) 718-2323

Fax: (503) 718-0333

Project Manager: Allison Greiner

RECEIVING LABORATORY:

SPL, Inc Houston 8880 Interchange Dr. Houston, TX 77054 Phone:(800) 969-6775 Fax: (713) 660-8975

Sample Name: Nov. Stormwater		Water San	npled: 11/17/10 15:47	(A10K275-01)
Analysis	Duc	Expires	Comments	
1664 HEM Subanalysis	12/03/10 17:00	12/15/10 15:47		
1664 SGT-HEM Subanatysis	12/03/10 17:00	12/15/10 15:47		
Containers Supplied:				
(A)I L Amber Glass - HCL				
(B)1 L Amber Glass - HCL				•

Standard Turn

Released By Date Received By Date

Received By Date

Received By Date

Page 1 of 1

Report ID: H10110538_6372

Printed: 11/30/2010 14:15

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Thursday, April 28, 2011

Katrina Greene Kinder Morgan Terminal 5 15550 N Lombard Portland, OR 97203

RE: Storm Water / April 2011

Enclosed are the results of analyses for work order <u>A11D220</u>, which was received by the laboratory on 4/15/2011 at 3:43:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: <u>AGreiner@Apex-Labs.com</u>, or by phone at 503-718-2323.

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Allison Greiner, Project Manager

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Storm Water

15550 N Lombard

Project Number: April 2011

Reported: 04/28/11 15:53

Portland, OR 97203

Project Manager: Katrina Greene

ANALYTICAL REPORT FOR SAMPLES

SAMPLE INFORMATION Sample ID Laboratory ID Matrix Date Sampled Date Received Stormwater Apr A11D220-01 Water 04/15/11 13:49 04/15/11 15:43

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Allison Greiner, Project Manager

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Kinder Morgan Terminal 5

15550 N Lombard

Portland, OR 97203

Project: Storm Water

Project Number: April 2011

Project Manager: Katrina Greene

Reported:

04/28/11 15:53

ANALYTICAL REPORT FOR SAMPLES

FIELD DATA (Provided by Client)

Lab Number	Sample Name	Field pH	pH Temp(C)
A11D220-01	Stormwater Apr	8.52	11.5

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Allison Greiner, Project Manager

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Storm Water 15550 N Lombard

Portland, OR 97203

Project Number: April 2011 Project Manager: Katrina Greene

Reported: 04/28/11 15:53

ANALYTICAL SAMPLE RESULTS

		То	tal Metals by EP	A 200.8	(ICPMS)			
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Stormwater Apr (A11D220-01)			Matrix: Water		Batch: 110447	70		
Copper	ND		0.00400	mg/L	1	04/26/11 14:18	EPA 200.8	
Lead	ND		0.00100	"	11	n n	**	
Zinc	0.0348		0.00400	"	**	n	n	

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Allison Greiner, Project Manager

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: April 2011 Project Manager: Katrina Greene Reported:

04/28/11 15:53

ANALYTICAL SAMPLE RESULTS

		Cor	nventional Cher	nistry Par	rameters			
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Stormwater Apr (A11D220-01)			Matrix: Water		Batch: 110443	30		
HEM (Oil and Grease)	ND		4.72	mg/L	1	04/23/11 15:18	EPA 1664	O-01
pH	9.30			pH Units	**	04/15/11 16:48	EPA 150.1	
pH Temperature (deg C)	17.9			***	**	H	н	
Total Suspended Solids	5.00		5.00	mg/L	11	04/19/11 16:30	SM 2540 D	

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Allison Greiner, Project Manager

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Storm Water

15550 N Lombard Portland, OR 97203 Project Number: April 2011 Project Manager: Katrina Greene Reported:

04/28/11 15:53

QUALITY CONTROL (QC) SAMPLE RESULTS

	<u></u>		Total	Metals by	EPA 200	D.8 (ICPMS	5)					
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1104470 - EPA 3015A			_				Wat	ter				
Blank (1104470-BLK1)				Pro	epared: 04/	26/11 09:44	Analyzed:	04/26/11 11	:48			
EPA 200.8												
Copper	ND		0.00400	mg/L	1							
Lead	ND		0.00100	11	"							
Zinc	ND		0.00400	11	н							
LCS (1104470-BS1)				Pro	pared: 04/	26/11 09:44	Analyzed:	04/26/11 11	:51			
EPA 200.8												
Copper	0.0559		0.00400	mg/L	1	0.0556		101	85-115%			
Lead	0.0566		0.00100	**	11	**		102	**			
Zinc	0.0551		0.00400	"	11	"		99	11			
LCS (1104470-BS2)				Pro	pared: 04/	26/11 11:45	Analyzed:	04/26/11 13	:17			
EPA 200.8												
Copper	0.0559		0.00400	mg/L	1	0.0556		101	85-115%			
Lead	0.0549		0.00100	"	"	**		99	"			
Zinc	0.0549		0.00400	**	**			99	"			

Labora	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Allison Greiner, Project Manager

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: April 2011 Project Manager: Katrina Greene **Reported:** 04/28/11 15:53

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters												
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1104307 - Method P	rep: Aq						Wat	er				
Reference (1104307-SRM1)				Pre	pared: 04/	15/11 15:05	Analyzed:	04/15/11 15	5:27			
EPA 150.1												
рН	6.03			pH Units	1	6.00		100 9	8.4-101.7%			
Reference (1104307-SRM2)				Pre	pared: 04/	15/11 15:05	Analyzed:	04/15/11 15	5:45			
EPA 150.1												
рН	7.97			pH Units	1	8.00		100 98.	74-101.269	/		
Reference (1104307-SRM3)				Pre	pared: 04/	15/11 15:05	Analyzed:	04/15/11 16	5:46			
EPA 150.1			···-					***************************************				
рН	6.05			pH Units	1	6.00		101 9	8.4-101.7%			
Reference (1104307-SRM4)				Prej	pared: 04/	15/11 15:05	Analyzed:	04/15/11 16	5:50			
EPA 150.1												
рН	7.97			pH Units	1	8.00		100 98.	74-101.269	/ ₄		

Anex	Labor	ratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Allison Greiner, Project Manager

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: April 2011

Project Manager: Katrina Greene

Reported:

04/28/11 15:53

QUALITY CONTROL (QC) SAMPLE RESULTS

			Conve	ntional Cl	nemistry	Paramete	rs					
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1104342 - Total Sus	spended So	lids					Wat	ег				
Blank (1104342-BLK1)				Pro	pared: 04	/19/11 13:00	Analyzed: (04/19/11 16	5:30			
SM 2540 D												
Total Suspended Solids	ND		5.00	mg/L	1							
Reference (1104342-SRM1)				Pro	pared: 04/	19/11 13:00	Analyzed: (04/19/11 16	5:30			
SM 2540 D												
Total Suspended Solids	92.0			mg/L	1	96.6		95	90-110%			

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Allison Greiner, Project Manager

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Storm Water

Project Number: April 2011 Project Manager: Katrina Greene

Reported: 04/28/11 15:53

QUALITY CONTROL (QC) SAMPLE RESULTS

			Conve	ntional Cl	nemistry	Paramete	ers					
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1104430 - EPA 1664							Wat	ter				
Blank (1104430-BLK1)		"		Pro	epared: 04/	23/11 09:17	Analyzed:	04/23/11 15	:18			
EPA 1664		_										
HEM (Oil and Grease)	ND		5.00	mg/L	1							
Blank (1104430-BLK2)				Pro	epared: 04/	23/11 09:17	Analyzed:	04/25/11 12	:30			
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	ND		5.00	mg/L	1							
LCS (1104430-BS1)				Pro	pared: 04/	23/11 09:17	Analyzed:	04/23/11 15	:18			
EPA 1664												
HEM (Oil and Grease)	35.6			mg/L	1	40.0		89	78-114%			
LCS (1104430-BS2)				Pro	parcd: 04/	23/11 09:17	Analyzed:	04/25/11 12	:30			
EPA 1664-SGT												
SGT-HEM (Non-polar Material)	16.5			mg/L	1	20.0		82	54-132%			

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Allison Greiner, Project Manager

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Storm Water 15550 N Lombard

Portland, OR 97203

Project Number: April 2011 Project Manager: Katrina Greene Reported:

04/28/11 15:53

SAMPLE PREPARATION INFORMATION

			Total Metals by EP	A 200.8 (ICPMS)			
Prep: EPA 3015A					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1104470							
A11D220-01	Water	EPA 200.8	04/15/11 13:49	04/26/11 09:44	45mL/50mL	45mL/50mL	1.00
			Conventional Chem	nistry Parameters			
Prep: EPA 1664			-		Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1104430							
A11D220-01	Water	EPA 1664	04/15/11 13:49	04/23/11 09:17	1N/A/1N/A	1N/A/1mL	NA
Prep: Method Prep	<u>p: Aq</u>				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1104307							
A11D220-01	Water	EPA 150.1	04/15/11 13:49	04/15/11 15:05	20mL/20mL	20mL/20mL	NA
Prep: Total Suspe	nded Solids				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1104342							
A11D220-01	Water	SM 2540 D	04/15/11 13:49	04/19/11 13:00	1N/A/1N/A	1N/A/1mL	NA

Apex Laboratories

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Allison Greiner, Project Manager

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Storm Water

15550 N Lombard Portland, OR 97203

Project Number: April 2011 Project Manager: Katrina Greene Reported:

04/28/11 15:53

Notes and Definitions

Qualifiers:

O-01

Result for total Hexane Extractable Material (HEM) is below reporting level for this sample. Silica Gel Treatment (HEM-SGT) analysis was therefore not performed.

Notes and Conventions:

DET

Analyte DETECTED

ND

Analyte NOT DETECTED at or above the reporting limit

NR

dry

Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.

RPD

Relative Percent Difference

MDL

If MDL is not listed, data has been evaluated to the Method Reporting Limit only.

WMSC

Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.

Batch OC

Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Blank Policy

Apex assesses blank data for potential high bias down to a level equal to 1/2 the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.

For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.

Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

- QC results are not applicable. For example, % Recoveries for Blanks and Duplicates, % RPD for Blanks, Blank Spikes and Matrix Spikes, etc.
- Used to indicate a possible discrepency with the Sample and Sample Duplicate results when the %RPD is not available. In this case, either the Sample or the Sample Duplicate has a reportable result for this analyte, while the other is Non Detect (ND).

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Allison Greiner, Project Manager

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5 15550 N Lombard Portland, OR 97203 Project Number: April 2011
Project Manager: Katrina Greene

Reported: 04/28/11 15:53

APEX LABS				•	CHAIN OF CUSTODY	Ĩ	0	<u>ب</u>	Sin:) I.	Ğ	>-			JEZZJ 114.	\triangle	12	8		500	7.7		
12232 S.W. Garden Place, Tigand, OR 97223 Ph. 503-718-2123 Fax: 503-718-0133	V7223 P4: 50	13-23-24 13-24	12.5 Fax	503	718.0.	÷	ļ		Ì				ĺ										ſ
Commen KANGER MAGAIN		Propert Mar	並			ĺ	-		٦	Project Name	Name		Ì			ļ		Project n					
7 States:				ĺ		İ	Phrone	انز				F.	ار			Energi							
K-Alla S Com of Madenics	ş							te il Ivo				i,	ANA	LYSH	ANALYSIS REQUEST.	, L							. !
She Lectrium (5) WA Usher: SAMPLE ID	EVRID #	SINIE	ZIRT AIA	SERNIVINODAO#	GUM-HATWA	ZALLIFOZ	X3.4.8	8700 HIDDY ACK!	8260 than POCS	820A 6988	8033 FCHS 8730 SEPI BVHS	BOST CHEW. Prof	RCRA Memb (8)	(£1) datale (itudia	AL She Ass the the Col. Col. Col. She file Fo, Ph. Mg. Mg. She Ma. Mg. Sk. Kr. So. Ap. Sm. Hg. Y. Kn.	ECLP Ment (8)	1380-COF3	7-0051	······································	and the state of t			
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Normal Furn Antiend Time (TAT) = 7-10 Business Days	ners Days		Si.		2	11		П	SPEC	SPECIAL INSTRUCTIONS:	SE	Ę	Š.	ļ									Γ-
e e e	1 Day	2 Day		3 Day					ئنا		Ŧ	V	#5	_5	[] A sale 10 1354		00	8,52 11.52	=	Ņ			
	4 DAV	SDAY		Other:		-			-	5	.		•	:									
	SAMPLES ARE BELD FOR 10 DAYS	FOR 30 II	AYS						_														
RELINQUISIUD BY:		MECEUN	in av:						REI IN	RELINDUSTRED BY	n G.H	ن ا				BEC	RECEIVED BY:	3.00					
Secure James Alland	unoy 1/5/1/ Survey	Signature	1	ļ		(Parts	إز		Suplier	4					llen;	Signature,	ş	-		line.			7
THE LANGE TO THE PARTY	PAZINATION 1543	Ponted Nunc	il.	İ		Time	ايو		Printed Ninie	Vienc					Ţim:	Printe	Printed Name			Time:			Т
春夜		Company							Соебину	ž						Campair	AFR.						

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Allison Greiner, Project Manager

Page 12 of 12

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches	Cloor of	Water	neeled	Pand (Clear of	Water	Javal	14/-1	A	Do als 6)	0
				Debris, B			culvert		Blockage,	abov			Around Free of		Surface Excessive	Comments
			Product	Floating	_				•			l				Describe any corrections taken
1			Troduct	& Oily S		unae	r C7?	Floating		we	ir?	Floating		Product	Spillage ?	and the date of completion
Date	Initials	Weather	Handled	YES	NO	YES	NO	& Oily	NO	YES	NO	& Oily :	NO	YES	NO	
			7	11.3	100	TES	100		NO	TES	NO	165	NO	YES	NO	(Attach separate sheet if required)
16	KM	Para	Korker					1								
17	pu	Rain	Alm	/										\		
18	MA	Shours	CATA											/	•	
19	MA	OCLORY	Allen	/												
20	MH	Clocky	NA	/			/					_/	,			
21	RM	Showing	4111				/	/			/	/		/		
22	Mm	Sports	Flan	/			/							_		•
23	MM	PClary	Fyn	_				/				/		/		
24	BM	Clarky	715m				/	_		/		/				
25	MH	Log,	ALL	/	·		1	/		_	/			1		
26	MH	Shows	FLIM								/	1				
27	MH	Shows	7. Shim					/								
28	Km,	Clayly	41 <u>T</u> 1												,	
29	MM	Shasys	HOTE													
30	BM	Close	FITA													
31	2m	Dermin	CAI4	_	,		/	/			_					

MANAGER SIGNATURE: AMMENDATE: 3/3/1/1

INSTRUCTIONS:

				Ditches	Clear of	Water	pooled	Pond (Clear of	Water	level	Water	Around	Dock S	Surface	Comments
				Debris, B	lockage,	at the		Debris, E	llockage,	above	e the	Dock	Free of	Free of E	xcessive	Describe any corrections taken
			Product	Floating		unde	· C7?		Solids	we	ir?		g Solids	Product 9	Spillage ?	and the date of completion
	1 1			& Oily S		V50		& Oily		\/F0			Sheen?	7/50		
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	KIU	Snow	TGKNO									,				
2	KNI	RAIN	76m					/			/					
3	KM	RANO	PG-12	/			/	/			/	/				
4	MH	Cloudy	7620	/			/			_	/			/		
5	MH	Classi	7622	/				/				/				
6	MH	Classy	W 570	/			/			_						
7	KM	Ciocoy	762				/	/								
8	KM	SHOWERS	750		_		/									
9	KM	RAIN	7600	/			/	/								
10	KM	away	7522	/							/					
11	MH	CLOUDY	7600	/												-
12	MH	Sitowers	PGREN								/			/		
13		SHOWERS	NA	/				1			/	/		/		
14	KM	RAIN	PGRN	1				/								
15	Km,	hours	4275	_		/		/				l		1		

Routing:	Please check box when reviewed	Γ		Distribution:
	2. Terminal Manager		į	Original to File
	3. Assistant			Copy to Stormwater Report File

INSTRUCTIONS:

				Ditches	Clear of	Water	pooled	Pond (Clear of	Water	level	Water	Around	Dock S	Surface	Comments
				Debris, B	llockage,	at the	culvert	Debris, E	Blockage,	above	e the	Dock	Free of	Free of E	xcessive	Describe any corrections taken
			Product	Floating		unde	r C7?	•	g Solids	we	ir?	Floating	g Solids	Product	Spillage ?	and the date of completion
Data	Initials	Weather	Uondlad	& Oily		VE0.	110		Sheen?	\ <u></u>			Sheen?			
Date			Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	KM	RAIN	RSTO								/	/		/		
17	KM	40004	WFSS	/												
18	MH	CWY	GSIS	1							/	1				
19	MH	CLEAR	NIA	j				/								
20	MH	CLEAR	76RN	/										/		
21	KM	Stavens	PGL			:	/	/						/		
22	KM	SHOWERS	761f				/ .	<u> </u>			/			/		
23	KM	RAIN	WSTD	/								/				
24	Иm	Smad	CAIL				/				/	/		/		
25	MH	CLEAR	F2I5	/							/					
26	MH	CLEAR	Penn				/				/	1		/		
27	MIT	CLOUDY	Parn	/			1	/			/	1				
28	KM	RAIN	PONEN	/				1								
29																
30	(\			
31					$\sqrt{\Lambda}$											
MAN	AGER SIG	NATURE(Dell	14	by	DATE:	3	12/	11							

INSTRUCTIONS:

				Ditches	Clear of	Water	pooled	Pond (Clear of	Water	r level	Water	Around	Dock S	Surface	Comments
				Debris, E	_	1	culvert		Blockage,	abov		ı	Free of		xcessive	Describe any corrections taken
			Product		g Solids	unde	r C7?		g Solids	we	eir?	i '	g Solids	Product 5	Spillage ?	and the date of completion
Date	Initials	Weather	Handled	YES	Sheen?	YES	NO	YES	Sheen?	YES	NO	& Oily	NO	YES	NO	(Attach separate sheet if required)
1	40	Clean	A /\							0				/	110	(Attach Separate sheet in required)
2	5m	Closcy	8 .											1		
3	SM.	Clown	Deln	/								/			:	
4	MH	Clody'	NA	/			/									
5	WH	Clouby	7200	/			/	/			1					
6	MIX	Fos	NOTO					1				/				
7	KM	Pawoy	FIID				/	/			/	/				
8	KIM	CLOUDY	FIII	/							/	6				
9	KM	CLOUDY	N/A	1			/				/			1	-	
10	KM	FOG	F215	/			1	/			/	/				
11	MH	CLOUBT	7620					/				1	_	1		
12	MH	المان	NA	/			j	1								
13	MH	Foca	76,00	/			/	/			1	/		/		
14	KM	CL00134	76RD	/			1	/			/	/				
15	KM	RANO	76 RN			/					/	/				

Routing:	Please check box when reviewed	Distribution:
	2. Terminal Manager	Original to File
	3. Assistant	Copy to Stormwater Report File

INSTRUCTIONS:

			Product	Ditches Debris, B Floating	lockage,	l .	culvert	Debris, E		Water	e the	Dock f	Around Free of	Free of E	Surface	Comments Describe any corrections taken
			1100000	& Oily S		unde	r C7?	Floating & Oily 9		we	NF?	& Oily	Solids	Product	Spillage ?	and the date of completion
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	MH	Clarky	NA								/					
2	MH	Cloudy	Floor					/			/	/		/		
3	BM	P. Cloni	Ahn													
4	MM	Plany	41 <u>11</u>								/					
5	BM	Drim	LOSTO		-		/	/			/					
6	MM	Bain	Flor	/							/	1				
7	MH	Clarky	070	/		<u></u>						/		_		
8	MH	Log!	Flin	/			/									
9	mH	Shown	4111	/										/	-	
10	MM	Rain	LOSTP							.,						
11	13m	Clorin	<u> PSTD</u>							/	-					
12	làm	Dan	Alba	1			تسسن									
13	BM	Cloaly	71m								<i>y</i>					
14	mH	Shory	PSTA								/		<i>y</i>			
15	MH	Show	NA							-						
	D	r	nov when reviewed	1			Dietrik									

Routing:	Please check box when reviewed	Distribution:	
	2. Terminal Manager	Original to File	
	3. Assistant	Copy to Stormwater R	eport File

INSTRUCTIONS: Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

			Complete time					, -			,					
				Ditches	Clear of	Water	pooled	Pond C	Clear of	Water	rlevel	Water	Around	Dock S	Surface	Comments
i				Debris, B	lockage,	at the	culvert	Debris, E	Blockage,	above	e the	Dock f	Free of	Free of E	xcessive	Describe any corrections taken
			Product	Floating	Solids	unde	r C7?	Floating	g Solids	we	eir?	Floating	g Solids	Product 9	Spillage ?	and the date of completion
				& Oily S	Sheen?			& Oily				& Oily	Sheen?			
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	m H	Show	Distan										·		again ¹	
17	BM	Clary	Alla		ur.											
18	12m	Prin	IIm										_	/	<i></i>	
19	S M	Clooly	4215	/												
20	ism	Clovely	Alm	/												
21	mH	Bain	Flor										<u>.</u>	/		
22	MH	Closy	3Hm													
23	mH	foy'	70/n		-		/									
24	ЖM	40G	4111					/			/			/		
25	₽m	Shows	JART	_				/								
26	19m	Jog	f171													
27	Иm	40c'	2370	/						<u></u>	_					
28	MA	Log	915m				/					/			·*	
29	MH	Clon:	2PSS			·		/			/					
30	MH	Lea	Flyn				/	/			/			/		
31	Km	Cimai	711m	<u> </u>				/								

MANAGER SIGNATURE: Selection Date: 1/3/1/

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches Clear of Water pooled				Clear of	Wate	-				. ,		
				Debris, B			culvert	Debris, E		abov		Dock I	Around	Dock S		Comments
			Product	Floating		unde			g Solids	we		Floating		Free of E		Describe any corrections taken
			7 104401	& Oily S		unue		& Oily		we	err			Product 9	Spillage ?	and the date of completion
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	& Oily		VEC.	110	
Date	_	^	1 iailuleu	163	NO	ILO	INO	150	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	RW.	Cloudy	RSTO													
17.	MH	Cloon	Ilm													
18	MA		NA											/		
19	mt	Clary	(2)B)									_/	/		,	
20	BM	Clothy	7171		-											
21	12m	Cloxy	LITI						· · · · · · · · · · · · · · · · · · ·						, ·	
22	MM	Cloudy	Flyn					/								
23	Mm	Closely	N/A								/					
24	MH	Clover	NIA					/						/		
25	mIt	Clary	NLA	/							/			/	*	
26	mlt	Shooz	NA	/			/				/					
27	iLm	Showon	NA	/							(
28	RW.	Dain	NA	/		/	· -					/		r	-	
29	\\mathbb{M}	Rein	Alm	/								/				
30	ldm	Olevely	PSin										/			
31	W/7	Clear	272	/			/				/	/		/		

MANAGER SIGNATURE: DATE: 16/1/

INSTRUCTIONS:

				Ditches	Clear of	Water	nooled	Pond (Clear of	Water	level	Water	Around	Dock 5	Surface	Comments
				Debris, B			culvert	ĺ	Blockage,	abov			Free of		Excessive	Describe any corrections taken
			Product	Floating		unde	r C7?	l	g Solids	we	ir?		g Solids	Product	Spillage ?	and the date of completion
	i			& Oily	Sheen?		i	& Oily	Sheen?			& Oily	Sheen?			
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	MM	Pain	CaIS													
2	dm	Clorky	WESS	./							/					
3	13m	Cloudy	RSTO	/												
4	Bm	Clork	FIII	/							/	/				
5	cm	Clonin	Flor	/				/			_/			/		
6	pu	Dain	NA	/							/			/		
7	Sm	Clarky	4a=C	/							/			_		
8	KM	Bain'	4aIS					/								
9	AM	Pain	fa18	-/										/		
10	MH	Share	Fhn					/		-						
11	mH	Shooy	NA									/		/		
12	MH	Clarky	allen			/								/		
13	KM	Cloudy	NIA	/		1								/		
14	Km	Rain	The	~	· ·						_			(
15	BM	Clayly	Fhn	/			/	/								
	 -	Please check 2. Terminal M 3. Assistant	box when reviewed anager				Original	oution: to File Stormwa	iter Repo	rt File						

INSTRUCTIONS:

			Complete the								,		31101111	011 010	rtout	g
1				Ditches	Clear of	Water	pooled	Pond C	Clear of	Water	level	Water	Around	Dock S	Surface	Comments
				Debris, B	lockage,	at the	culvert	Debris, E	llockage,	above	e the	Dock F	ree of	Free of E	xcessive	Describe any corrections taken
			Product	Floating	g Solids	unde	r C7?	Floating	Solids	we	ir?	Floating	Solids	Product S	Spillage ?	and the date of completion
				& Oily S	Sheen?			& Oily S	Sheen?			& Oily S	Sheen?			
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	An	Clarky	NA												<i>-</i>	
2	2m	dog	NA	/		/	·				/				at .	
3	BM	pelany	In	/										/	,	
4_	12m	Mordi	7.4m					_								
5	mH	Cloudy	YrI1					/			/			/		
6	MH	Showen	65IS	/				/			_	. /	-			
7	m17	Showan	7.1hn								/		-	/		
88	Kin	Closey	4215	/			/				/					
9	Km	Shaars	N/A	/			/	/								
10	MM	Cloudy	NIP	/			/	/			1					
11	19W	Closey	128 TO											1/2		
12	WH	Log	LOPSS												,	
13	MH	Show	1425					/			/					
14	m 17	Closely	42K	_/								6				
15	12m	Clonely	Alm	a.				/						_/		
	Boutings	Diament of the	nox when reviewed		Dietrik	4.				1						

Routing:	Please check box when reviewed	Distribution:
	2. Terminal Manager	Original to File
🗆	3. Assistant	Copy to Stormwater Report File

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches	Clear of	Water	pooled	Pond C	lear of	Water	level	Water	Around	Dock S	Surface	Comments
				Debris, B			culvert	Debris, B		above			Free of	ļ	xcessive	Describe any corrections taken
			Product	Floating	g Solids	unde	r C7?	Floating	Solids	we	ir?	Floating	g Solids	Product 9	Spillage ?	and the date of completion
				& Oily	Sheen?			& Oily S	Sheen?				Sheen?			
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	DM	Prim	Sym	1			/				/					
17	5M	Clearly	Ash								_/					
18	BM	Brun	Hm		am ^{er}									/		
19	MH	Clark	GIII							/						
20	mH	Rain	Flyn		<u> </u>	/				·		/		/		
21	MH	alean	THO	/												
22	Km	Clari	2DSS				<i></i>									
23	4m	ochuli	NA	/		//						/				
24	Km	Cody	GSIS	/												
25	DM	OCLORIN	NA	/												
26	MH	Rain	4171	/												
27	MM	OCTORIN	71 <u>11</u>				~						, e			
28_	cm	OCLOUCH	GSIS				<i></i>	/				/			. —	
29	iàm	Delivery	i i	<							_	/		/		
30	200	Pan	65T5	/							/	/				
31				-1	<u> </u>			-								

MANAGER SIGNATURE: 11 34/10

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches Debris, B		Water	pooled culvert	Pond (Clear of	Water		Water		Dock S	-	Comments
			Product	Floating	_	l	r C7?		g Solids	above we		Dock f Floating		Free of E	1	Describe any corrections taken and the date of completion
				& Oily					Sheen?			& Oily S		, roudor (piliago .	and the date of completion
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	MH	Clar	N/A											,		
17	Hm	Coa	NIA				_								/	
18	MM	pelani	NIA	/			/				_					
19	Rm	Delary	NA	<i>\'</i>				/								
20	12m	404	NIA										nga para da da da da da da da da da da da da da		1	
21	19W	Jog	250		, mar		/								_/	
22	MH	Clarky	NA									1	 		_/	
23	MH	Bhowns	NIA							/						
24	MH	Rain	NA				1/								/	
25	Mm	Rain	N/A	. /				/								
26	MM	Clarly	NIA	/								p por series				
27	am	Cloud	NIA								/			,	/	
28	KM	Rain	79hm													
29	M#	Som	John								_	/				
30	MH	Shaag	Yhn	/			/	/					, 2			
31	MH	Clordy	Flyn	//											/	

MANAGER SIGNATURE: DATE: 1/2/14

INSTRUCTIONS:

-				Ditches	Clear of	Water	pooled	Pond 0	lear of	Water	level	Water	Around	Dock S	Surface	Comments
				Debris, E	Blockage,	at the	culvert	Debris, E	llockage,	abov	e the	Dock F	Free of	Free of E	Excessive	Describe any corrections taken
	:		Product	Floating	g Solids	unde	r C7?	Floating) Solids	we	ir?	Floating	g Solids	Product	Spillage ?	and the date of completion
					Sheen?			& Oily				& Oily S				
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	MH	Clear	Alhn				/									
2	MH	Clarly		/												
3	mA	Clasy	WESS	/												
4	Hm	Cloryly	WESS	/												
5	Rm.	Clocky	Illin								/			/		
6	dm	Clean	2)/A	/				1			,	(
7	idm	Octordi	RSTO				/	C			/					
8	MH	Cloudy	0 -	January Comment								/	L			
9	MH	Shares	RSTD	/			/	/								
10	mH	Pain	2510	.,/			/	/			/			_		
11	Cm	Cloudy	10570					/			/					
12	dm	Joa)	WSTO	, market								./				
13	Jam	for	7/2m					/			0			(4
14	Km'	J. J.	NIA									(,··	1		
15	MH	DCINY	NIA		,								a- 1			
	Routing: Please check box when reviewed 2. Terminal Manager 3. Assistant						Original	oution: to File Stormwa	ter Repo	rt File						

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

			`	Ditches	Clear of	Water	pooled	Pond C	lear of	Water	level	Water	Around	Dock S	Surface	Comments
				Debris, B	lockage,	at the		Debris, B		abov		Dock f			xcessive	Describe any corrections taken
			Product	Floating	Solids	unde	r C7?	Floating	Solids	we	eir?	Floating	Solids		Spillage ?	and the date of completion
		:		& Oily S	Sheen?			& Oily S	Sheen?			& Oily	Sheen?			
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	Km	Dain	NA	_/			/					_/_				
17	MH	Closely	Co1I4	_/				/			/			/		
18	MH	Dan	Flyn				_/	/			\	/				
19	MH	Shagas	Flor				/				/					
20	MM	Bain	NOF					/			/					-
21	KM	Clary	OTED	/												
22	S) M	Cloudy	RFSS										.e			
23	1dm	Closely	JOFF										/			
24	MH	DCharly	NA								/	/				
25	MA	Log	NA								/					
26	MH	Sparin	NIA			i		/	,							
27	m1+	Closgy	NIA					. ,			/					
28	KM	Clary	NIA									/		/		
29	'dm	Clarly	NA	_			/	/				_		1		
30	Am	Closey	NH				/				/					
31		(L	<i>[</i>				1	,			•				

MANAGER SIGNATURE: () () () DAT

ULL_DATE: 4/30/10

INSTRUCTIONS:

			Complete this	109 00			110 100	t day o	1 04011	month	1, 101 1/2	114 45		OH the	Nout	ing nat.
				Ditches	Clear of	Water	pooled	Pond (Clear of	Water	level	Water	Around	Dock S	Surface	Comments
Į.				Debris, B	llockage,	at the	culvert	Debris, E	Blockage,	abov	e the	Dock	Free of	Free of E	Excessive	Describe any corrections taken
			Product	Floating	g Solids	unde	r C7?	Floating	g Solids	. WE	eir?	Floating	g Solids	Product :	Spillage ?	and the date of completion
					Sheen?				Sheen?				Sheen?			
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	KM.	Coudy	7 Grn	/			/	/			<i>i</i> /	V		1/		
2	KM	Clear	7Gen	/			\	/				i/		~	~	
3	MH	Coan	Flyn	/				/								
4	MH	Olian	7 Um	/				/								
5	MH	aprila	BSIS	/				/						/		
6	KM	Morly	NA	/			/							/		
7	11	Dain	Flyn	/				/				/				
8	Am	Clary	4215	/												
9	4m	Cloudy	RSTO	/				/			/	/		/		
10	mH	Clary	_													
11	MH	Clarly	1 , , , -									/		/		
12	mH	Olea.	NIA				/									
13	KM	pclan	RSTO	1		.~		1			/					
14	AM	Pliese	,										,*			
15	Rm	Los	NA				/						<i></i>			
	Doutlan	<u></u>		1			Dietrik	oution:				1				
	I	2. Terminal M	box when reviewed			l .	Original									
		3. Assistant	ioagoi			B .	1 -	Stormwa	ter Repo	rt File						
		Jo. Assistant		1			copy to	Storrive	rei izebo	TUTTLE		l				

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Dileter	a											
				Ditches		Water p		Pond C		Water		Water /		Dock S		Comments
			Dun dun d	Debris, B	-	at the		Debris, B		abov		Dock F			xcessive	Describe any corrections taken
1 1			Product	Floating		undei	· C7?	Floating		we	eir?	Floating		Product 9	Spillage ?	and the date of completion
	1 10 1			& Oily		1		& Oily S				& Oily S				
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	KM	clear	NA	V			V	V			V			/	ر	
17	KM	Clery	7 GRN	V			V	V			V	i/				
18	KM	Cloudy	OGEN	V			V	V			V	i/	-	V		
19	KM	Cloudy	Tarain	V			V	/			V				`	
20	MH	Clear	TGM	\checkmark			V				/	1/			- '	
21	MH	PCbudi	G55	V			V	V			V	/				
22	MH	Unide	45(1)	$\sqrt{}$,		V	V		/		
23	KM	P.Clardil	N/A	V				/			/	i /				,
24	KIL	Col	PSTD	V			V	V			V	/		/		
25	KM	Clear	F215	$\sqrt{}$			V	V			V	V		$\sqrt{}$		
26	KM	Gear	RSTD	V			✓	V			/	~		/		
27	MH	Cloudy	RFSS	\checkmark			V	V			1	V	,	V	· ·	
28	MH	P. Cloudy	N/A	\			/	/			V					
29	MU	Tobad	NA				$\sqrt{}$	V	/		V	1			/	
30	4M	Under	NIA	V			V				V	V			.,	
31	Km	Childy	TGR				V		/			<i></i>		1		

GER SIGNATURE: JEELLUL DATE: 9/1/14

INSTRUCTIONS:

				Ditches	Clear of	Water	pooled	Pond C	lear of	Water	level	Water	Around	Dock S	Surface	Comments
				Debris, B	lockage,	at the	culvert	Debris, B	lockage,	above			Free of		Excessive	Describe any corrections taken
			Product	Floating	Solids	unde	C7?	Floating	Solids	we	ir?	Floating	g Solids	Product 9	Spillage ?	and the date of completion
				& Oily S	Sheen?			& Oily S	Sheen?			& Oily	Sheen?			ł
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
11	MH	Cordy	NA	V			V	/	<u> </u>		V	V		V		
2	KM	Clouder	F.115	/			/	<i>i</i> /			1 /	V		V		
3	KM	Cordu	NIA	V			V	V				1			/	
4_	KM	Foa	JORN	V			V	i/			V	V		V		
5	KM	Uear	TGRN	V		·	7	V			V			1		
6	MH	Clardy	JORN	V			V	V			V			2		
7	MH	Coudy	NIA	/	-		V	V			V	/		V		
8	MH	Chroy	TGRN	\checkmark			V	\checkmark			V	V				
9	KM	Clardy	2 GRA	V			V	V			1	V		$\sqrt{}$		
10	Km	Cloudy	N/A	V			/	V			<i>\(\)</i>	V		ν		
11	KM	Chudy'	RSTD	V			1	V			V	~		1		
12	HM	Pf Clarky	RSID	$\sqrt{}$			V	\checkmark			V	V		/	,	
13	MH	Gear	7 GRN	V			V	V			/			V		
14	MH	Clear	Y Gral	V			V	V			V	\		1		
15	MH	Clour	NA	$\sqrt{}$			i/	V				i/				

Routing:	Please check box when reviewed	Γ	Distribution:	_
	2. Terminal Manager		Original to File	
	3. Assistant	Ĺ	Copy to Stormwater Report File	

MONTH OF June 2010

INSTRUCTIONS:

		<u> </u>													i	ing list.
				Ditches		Water (Pond C	1	Water		Water		Dock S	l l	Comments
			Product	Debris, B	-		culvert	Debris, B		above		Dock F		•	xcessive	Describe any corrections taken
			Troduct	Floating		unde	1677	Floating		we	ir?	Floating		Product 8	Spillage ?	and the date of completion
Date	Initials	Weather	Handled	_ & Oily S YES	NO	YES	NO	& Oily S YES		YES	NO	& Oily		VEC	- NO	
Bato			1 landled	160	INO	TES	NO	150	NO	153	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	WM	Class	NA									/.				1
17		DCParin	NA					/								
18	WH	Claring	Thin						,		/					
19	RW	Clear O	Alm	_				/			/					
20	Km	Clarly	NA	/		:	_									
21	Km	Chidy	NA	1/			~	V				1		~		
22	KM	P. Cloude	NIA	V	_	/	/	/			V	1		W		
23	MH	Cloudy	N/A	i/			V	i/			V	V		<i>`</i>		
24	MH	Cear	F215	/			V	V			V	V		V		
25	MH	Ceal	NIA	V			V	レ			V	V		V		·
26	KM	Clear	NA	V			/	/			<i>i</i> /	\		1		
27	KM	Clour	NA	V			1	/			~	7		V		
28	KM	Chidu	Jan	V			V	~			V	V		1		
29	KM	Clouder	NIA	V			V	V			/	1		V		
30	MH	Cloude	NA	\checkmark			V	/			V	V		V	,	
31	MH	Cloudy	NIA	V			V	V			1/	V		/		

\hat{A}	MANAGER SIGNATURE:	v	DATE:
		Name to the same t	

INSTRUCTIONS:

				Ditches		Water		Pond C		Water			Around	l	Surface	Comments
			Product	Debris, B Floating		at the under		Debris, B			e the		Free of	I	excessive	Describe any corrections taken
			1 Toddot	& Oily S		unde	077	Floating & Oily 9		We	eir?		g Solids Sheen?	Product	Spillage ?	and the date of completion
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	KM	Cloudy		/			/	/			/	/		/		(maon or paration and morphisms)
2	MH	Showers	26PN				/	/			\	/		/		
3	MH	Fartly Cloudy	5GPN					/			/			/		
4	MH	Clear	76PN											/		
- 5	KM	Cloudy	N/A	/			/	/				1		/		
6_	KM	Clear	NIA	1			/				/	/		/		
7	JOM	Cloan	MA					/					/	/		
8	KM	Clear	7GPN	/,			/	1			/	/				
9	MH	Uear	76RN					/								
10	WH	Chris	atha					/								
11	MH	Clary	Jym													
12	KM	Clarky	75~	/				/						1		
13	2m	Clark	Den		·			/			_					
14	KM	Clear	NIA	/								_/				1
15	dm	Clear	NA				/									

Routing:	Please check box when reviewed	Distribution:
	2. Terminal Manager	Original to File
	3. Assistant	Copy to Stormwater Report File



Kinder Morgan Terminals

July 21, 2010

Mr. Timothy P. Dean City of Portland - Environmental Services Water Pollution Control Laboratory Industrial Stormwater Program 6543 N. Burlington Avenue Portland, OR 97203-5452

Re: Annual Stormwater Report for 2010

Ref: Permit #101377

Dear Mr. Dean:

Enclosed is Portland Bulk Terminal Five's annual Stormwater Report for the year ending June 30, 2010.

During the process of reviewing this annual report it was discovered that the sample taken on 12/16/09 had a benchmark exceedance in its Copper total. This Copper exceedance was not reported as required by the 1200-Z Stormwater discharge Permit. The corrective action taken due to the benchmark exceedance of the Zinc total during the same sample time also corrected the Copper total which was reaffirmed by the following three discharge samplings.

If there are questions, please do not hesitate to call me at the number listed below.

Sincerely yours,

KINDER MORGAN BULK TERMINALS

Jack Waller

Manager, Terminal 5

CC:

Regional EHS Manager

File

Monitor for the following pollutants at sampling point(s) specified in your SWPCP. Add more sheets if necessary (e.g., if more than 4 samples are collected per pollutant or facility in the sample points). You MUST also attach a copy of laboratory results. sheet(s) and associated QA/QC information to this form. Name or Number of Sample Date Suspended Supplied Sociality of Nases, Total (adaptive sampling points). You MUST also attach a copy of laboratory results. sheet(s) and associated QA/QC information to this form. Name or Number of Sample Date Suspended Su	D ''' 1 '''		<u>ndustrial</u>	<u>Stormwa</u>	ter Disch					<u> Permit </u>	
Aboratory Name: Specially Analytical Aper Lates Department Depar			Kinder Morgan			ODEQ Fil	e No./Facilit	y ID:	70613		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Monitor for the following pollutants at sampling point(s) specified in your SWPCP. Add more sheets if necessary (e.g., if more than 4 samples are collected per pollutant or facility sheet for the sampling points). You MUST also attach a copy of laboratory results a sheet(s) and associated QA/QC information to this form Name or Number of Sampling Point(s) (group Sample Date PH ** Suspended Solids, Total ** Suspende	<u> </u>	ame:	Portland Bulk Term	inals		Reporting	Period:	July 1,	2009	to June 30, ²⁰¹⁰	
Monitor for the following pollutants at sampling point(s) specified in your SWPCP. Add more sheets if necessary (s.g., if more than 4 samples are collected per pollutant or facility before the source of the following points). You MUST also attach a copy of laboratory results sheet(s) and associated QA/QC Information to this form Name or Number of Sample Date PH ** Suspended Seption of Sample Date Sample Date PH ** Suspended Sample Sample Sample Date Sample Date Sample Date Sample Date PH ** Suspended Sample Sample Sample Date Sample Dat	Facility Location:		15550 North Lomb	ard, Portland, OR 97	7203	Laborator	y Name:		Specialty Analytic	al/ Apex Labs	
Monitor for the following pollutants at sampling point(s) specified in your SWPCP. Add more sheets if necessary (e.g., if more than 4 samples are collected per pollutant or facility. Power of sampling points are sampling point of sampling point of sampling Point(s) (group) Name or Number of Sampling Point(s) (group) Sample Date By By Suspended Solids, Total Sugar of Sample Date Subject Subje	County:		Multnomah			Laborator	y ORELAP	#:	OR01039		DEQ
Sampling Point(s) (group date per sampling point) Sample Date Solidar, Total Sampling Point(s) (group date per sampling point) Sulfation Sample Sampling Point(s) Sulfation Sample Sampling Point(s) Sample Sam										n	State of Oregor Department of Environmenta Quality
Outfail 001 12/16/2009 6.8 26 6.2 0.104 0.016 0.642	Sampling Point(s) (group	Sample Date	pH **	-	Grease, Total		Lead, Total	Zinc, Total	E. coli *	1	olids and
Outfall 001 12/31/2009 6.7 39 ND ND ND 0.0883 Not 1: Submit this report to the appropriate DEQ region agent offices (see below) annually by July 31st. The report of the appropriate DEQ region agent offices (see below) annually by July 31st. The report of the appropriate DEQ region agent offices (see below) annually by July 31st. The report of the appropriate DEQ region agent offices (see below) annually by July 31st. The report of the appropriate DEQ region agent offices (see below) annually by July 31st. The report of the appropriate DEQ region agent offices (see below) annually by July 31st. The report of the appropriate DEQ region agent offices (see below) annually by July 31st. The report of the appropriate DEQ region agent offices (see below) annually by July 31st. The report of the appropriate DEQ region agent offices (see below) annually by July 31st. The report of the appropriate DEQ region agent offices (see below) annually by July 31st. The report of the appropriate DEQ region agent offices (see below) annually by July 31st. The report of the appropriate DEQ region agent offices (see below) annually by July 31st. The report of the appropriate DEQ region agent offices (see below) annually by July 31st. The report of the policy and the po	data per sampling point)		s.u.	mg/L	mg/L	mg/L	mg/L	mg/L	counts/100 ml	** Effluent limits for these parameters apply to son	ne industries
Outfall 001 25/2010 6.85 N0 N0 0.00518 0.001 0.0257 must contain the results of all stormwater emotioning valid to the containing of the c	Outfall 001	12/16/2009	6.8	26	6.2	0.104	0.016	0.642			
Outfall 001 2/5/2010 6.85 ND ND 0.00518 0.001 0.0297 must contain the results of all stormwater monitoring value of the pollutantity, please eport. **If in the principal storm of the pollutantity, please eport **If in the principal storm of the pollutantity, please eport **If in the principal storm of the pollutantity, please eport **If in the principal storm of the pollutantity, please eport **If in the principal storm of the pollutantity, please eport **If in the principal storm of the pollutantity, please eport **If in the principal storm of the pollutantity, please eport **If in the principal storm of the pollutantity, please eport **If in the principal storm of the pollutantity, please eport **If in the principal storm of the pollutantity, please eport **If in the principal storm of the pollutantity, please eport **If in the principal storm of the pollutantity, please eport **If in the principal storm of the pollutantity, please eport **If in the principal storm of the pollutantity, please eport **If in the principal storm of the pollutantity, please eport **If in the principal storm of the pollutantity, please eport **If in the principal storm of the pollutantity of the pollutantit	Outfall 001	12/31/2009	6.7	39	DN	ND	ND	0.0863			
Outfall 001 224/2010 6.92 ND ND 0.00414 ND 0.0559 for one or more of the pollutantits), please report "M" intoclumin(s)-see permit-Shedule B.3. Geometric Mean (Note 4) 6.817 31843 6.200 0.013 0.004 0.097.	Outfall 001	2/5/2010	6.85	ND	ND	0.00518	0.001	0.0297		must contain the results of all stormwater monito	ring
Geometric Mean (Note 4) 6.817 31:843 6.200 0.013 0.004 0.097 Note 2: Non-detects must be reported as "ND" along with applicable method detection limit in parentheses - e.g., No. (0.001). Note 3: If a stormwater sampling result exceeds any of it benchmark values, the permit registrant must, within 30 calendar de of receiving the sampling results, investigation of the calendary of the submitted of the calendary of the submitted of the calendary of the submitted of the calendary of the submitted of the calendary of the submitted of the calendary of the submitted of the submitted of the calendary of the submitted of the calendary of the submitted of the submitte	Outfall 001	2/24/2010	6.92	ND	ND	0.00414	ND	0.0529		for one or more of the pollutant(s), please report	
Geometric Mean (Note 4) Geometric Mean (Note 4) Geometric Mean (Note 4) Geometric Mean (Note 4) Geometric Mean (Note 4) Geometric Mean (Note 4) Geometric Mean (Note 4) Geometric Mean (Note 4) Geometric Mean (Note 4) Geometric Mean (Note 4) Geometric Mean (Note 4) Geometric Mean (Note 4) Permit Benchmark Si55-9.0 130 10 0.1 0.4 0.6 406 Name/Title Principal Executive Officer or Authorized Delegate	Geometric Mean	(Note 4)	6.817	31.843	6.200	0:013	0.004	0.097		Note 2: Non-detects must be reported as "ND" alo applicable method detection limit in parentheses	
Geometric Mean (Note 4) Geometric Mean (Note 4) Geometric Mean (Note 4) Geometric Mean (Note 4) Decame effective on July 1, 2007, report the geometric mean value of the last 4 samples collected for each pollutant value is automatically calculated if using the Excel versit the DMR form. Geometric Mean (Note 4) Permit Benchmark 5:5-9.0 130 10 0.1 0.4 0.6 406 Name/Title Principal Executive Officer or Authorized Delegate (Please Print)	Geometric Mean	(Note 4)				Transported - 1				benchmark values, the permit registrant must, wi calendar days of receiving the sampling results, I the cause of the benchmark exceedance(s), revie SWPCP and submit an Action Plan for departmen	thin 30 Investigate w the
Geometric:Mean (Note 4) Permit Benchmark 5:5-9:0 130 10 0:1 0:4 0:6 406 Name/Title Principal Executive Officer or Authorized Delegate (Please Print)	Geometric Man	(Note 4)		· .						became effective on July 1, 2007, report the geom value of the last 4 samples collected for each poll parameter, from each sampling point. The geome value is automatically calculated if using the Exc	netric mean lutant etric mean
Permit Benchmark 5:5-9:0 130 10 0:1 0.4 0:6 406 Name/Title Principal Executive Officer or Authorized Delegate (Please Print)	- Control of the cont	S Company of the Comp	1.1 2000/00/00/00/00/00/00/00/00/00/00/00/00	- Programme of the Control of the Co	The state of the s					· - - -	
(Please Print)		-	5.5 - 9.0	130	10	0.1	0.4	0:6	406		
				Na	me/Title Princip	oal Executive C	officer or Author	ized Delegate			
Tolophono: 503-285-4200 Email: walleri@kindermorgan.com	(Please Print)										
Telephone. 303-203-4200 Email. Walchjeskindsmotgan.com	Telephone: 503-285-4200			Email:	wallerj@kindermo	organ.com					
I certify, under penalty of law, that this document and all attachments were prepared under my direct supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations. Date	submitted. Based on my in	nquiry of the person	or persons who m	anage the system	, or those person	s directly respo	nsible for gatherir	ng the information	n, the information ment for knowing	submitted is, to the best of my knowledge and bel	

See reverse side for additional visual monitoring requirements

Monthly Visual Observations Record Visual Observations for Oil and Grease Sheen and Floating Solids: Oll and Grease Sheen - No visible sheen allowed. Monthly observation when discharging, For | Floating Solids (associated with industrial activities) - No visible discharge allowed. Monthly observation when months when no discharges occur, please write in "No Discharge" for that month. discharging. For months when no discharges occur, please write in "No Discharge" for that month, Observations (please note the sampling point(s) name or number) July No Discharge August No Discharge September No Discharge 10/26/2009 No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater. October 11/15/2009 No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater. November December 12/15/2009 No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater. 1/17/2010 No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater, January 2/13/2010 No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater. February 3/11/2010 No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater. March 4/2/2010 No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater. April May 5/17/2010 No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater. No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater, June 6/6/2010 For facilities located within the following local jurisdictions, For all other locations, please submit one (1) copy of this report and laboratory results sheet(s) and the QA/QQ please submit one (1) copy of this report and laboratory results documentation to the appropriate DEQ regional office annually by July 31st: sheet(s) and QA/QC documentation to the local jursisdiction **DEQ Northwest Region Office DEQ Eastern Region Office** annually by July 31st: 2020 SW 4th Ave. Suite 400 300 SE Reed Market Rd. Portland, OR 97201 Bend, OR 97702-2237 Phone: (503) 229-5263 Phone: (541) 388-6146 Clean Water Services City of Portland City of Eugene Hours: 8 am - 5 pm Hours: 8 am - 5 pm Industrial Stormwater Industrial Stormwater Industrial Source Control 2550 SW Hillsboro Hwy. Section 410 River Ave. Hillsboro, OR 97123 Water Pollution Control Lab Eugene, OR 97404 **DEQ Western Region Office** Eastern **DEQ Western Region Office DEQ Western Region Office** 6543 N Burlington Ave. (Benton, Lincoln, Marion, (Lane and Linn counties) (Coos, Curry, Douglas, Jackson, Portland, OR 97203-5452 Polk, and Yamhili counties) 1102 Lincoln St. Suite 210 and Josephine counties) Eugene, OR 97401 750 Front St NE, #120 221 Stewart Ave. Suite 201 Salem, OR 97301-1039 Phone: (541) 686-7838 Medford, OR 97501 Phone: (503) 378-8240 Hours: 8 am - 5 pm Phone: (541) 776-6010 Hours: Mon - Thurs: 8 am - 5 pm Hours: 8 am - noon, 1 - 5 pm Fri: 8 am - noon, 1 - 5 pm

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Tuesday, February 16, 2010

Katrina Greene Kinder Morgan Terminal 5 15550 N Lombard Portland, OR 97203

RE: General / [none]

Enclosed are the results of analyses for work order <u>A10B071</u>, which was received by the laboratory on 2/5/2010 at 1:40:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: AGreiner@Apex-Labs.com, or by phone at 503-718-2323.

Apex Laboratories

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: General

15550 N Lombard

Project Number: [none]

Reported:

Portland, OR 97203

Project Manager: Katrina Greene

02/16/10 16:19

ANALYTICAL REPORT FOR SAMPLES

	SA	MPLE INFORMATI	ON	
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Stormwater	A10B071-01	Water	02/05/10 12:35	02/05/10 13:40

Apex Laboratories

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: General

Project Number: [none]

Reported:

15550 N Lombard Portland, OR 97203

Project Manager: Katrina Greene

02/16/10 16:19

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)											
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes			
Stormwater (A10B071-01)			Matrix: Water		Batch: 10021	54					
Copper	0.00518		0.00400	mg/L	1	02/11/10 15:41	EPA 200.8				
Lead	0.00100		0.00100	Ħ	Ħ	"	"				
Zinc	0.0297		0.00400	**	#	н	**				

Apex Laboratories

 ${\it The results in this report apply to the samples analyzed in accordance with the chain of}$ custody document. This analytical report must be reproduced in its entirety.

Allison Greiner For Darwin Thomas, Business Development Director

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard

Portland, OR 97203

Project: General

Project Number: [none]

Project Manager: Katrina Greene

Reported: 02/16/10 16:19

ANALYTICAL SAMPLE RESULTS

Conventional Chemistry Parameters												
Analyte	Result	MDL	Reporting Limit Matrix: Water	Units	Dilution Batch: 100210	Date Analyzed	Method	Notes				
Stormwater (A10B071-01)					Batch: 100210							
HEM (Oil and Grease)	ND		4.72	mg/L	I	02/08/10 10:34	EPA 1664	O-01				
рН	6.85			pH Units	"	02/05/10 15:31	EPA 150.1					
pH Temperature (deg C)	16.3			**	"		11					
Total Suspended Solids	ND		5.00	mg/L	"	02/09/10 17:30	SM 2540 D					

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Kinder Morgan Terminal 5

Project: General

15550 N Lombard Portland, OR 97203 Project Number: [none]
Project Manager: Katrina Greene

Reported: 02/16/10 16:19

QUALITY CONTROL (QC) SAMPLE RESULTS

Total Metals by EPA 200.8 (ICPMS)												
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1002154 - EPA 30	15A						Wat	ter				
Blank (1002154-BLK1)				Pro	epared: 02/	10/10 09:40	Analyzed:	02/11/10 1	3:32			
EPA 200.8									***************************************			
Copper	ND		0.00400	mg/L	1							
Lead	ND		0.00100	11	Ħ							
Zinc	ND		0.00400	**	п					***		
LCS (1002154-BS1)				Pro	epared: 02/	10/10 09:40	Analyzed:	02/11/10 1	3:35			
EPA 200.8												
Copper	0.0615		0.00400	mg/L	1	0.0556		111	85-115%			
Lead	0.0555		0.00100	**	**	11		100	**			
Zinc	0.0573		0.00400	**	"	**		103	n			

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Kinder Morgan Terminal 5

Project: General

15550 N Lombard

Project Number: [none]

Reported:

Portland, OR 97203

Project Manager: Katrina Greene

02/16/10 16:19

QUALITY CONTROL (QC) SAMPLE RESULTS

			Conve	ntional Ch	emistry	Paramete	rs					
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1002103 - Method F	Prep: Aq						Wa	ter				
Duplicate (1002103-DUP1)				Prej	oared: 02/	05/10 15:12	Analyzed:	02/05/10	15:33			
QC Source Sample: Stormwater (A10B071-01)											
EPA 150.1												
рН	6.88			pH Units	1		6.85			0.4	10%	
pH Temperature (deg C)	16.4			**	"		16.3			0.6	10%	
Reference (1002103-SRM1)				Pre	pared: 02/	05/10 15:12	Analyzed:	02/05/10	15:26			
EPA 150.1	***											
рН	6.04			pH Units	1	6.00		101	98.4-101.7%			
Reference (1002103-SRM2)				Prej	pared: 02/	05/10 15:12	Analyzed:	02/05/10	15:34			
EPA 150.1							-					
pН	7.97			pH Units	1	8.00		100 98	8.74-101.269	/ ₁		

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Kinder Morgan Terminal 5

Project: General

15550 N Lombard Portland, OR 97203 Project Number: [none]

Project Manager: Katrina Greene

Reported: 02/16/10 16:19

QUALITY CONTROL (QC) SAMPLE RESULTS

s	
Source %REC Result %REC Limits R	RPD PD Limit Notes
Water	
Analyzed: 02/08/10 10:34	
Analyzed: 02/08/10 17:20	
	/
Analyzed: 02/08/10 10:34	
89 78-114%	
Analyzed: 02/08/10 17:20	
90 64-132%	
	90 64-132%

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Kinder Morgan Terminal 5

Project: General

15550 N Lombard Portland, OR 97203

Project Number: [none]

Project Manager: Katrina Greene

Reported:

02/16/10 16:19

QUALITY CONTROL (QC) SAMPLE RESULTS

Conventional Chemistry Parameters											
Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
spended So	lids					Wat	er				
Prepared: 02/09/10 10:24 Analyzed: 02/09/10 17:30											
ND		5.00	mg/L	1							
			Pro	epared: 02/	09/10 10:24	Analyzed: (02/10/10 1	0:15			
		·									
95.7			mg/L	1	87.9		109	90-110%			
	nD	ND	Result MDL Limit Uspended Solids ND 5.00	Result MDL Limit Units Units Units Pro ND 5.00 mg/L Pro	Result MDL Limit Units Dil. Ispended Solids Prepared: 02/ ND 5.00 mg/L 1 Prepared: 02/	Result MDL Limit Units Dil. Spike Amount	Result MDL Limit Units Dil. Spike Amount Result	Result MDL Limit Units Dil. Spike Source Result %REC	Result MDL Reporting Units Dil. Spike Source Result %REC Limits	Result MDL Reporting Units Dil. Spike Source Result REC Limits RPD	Result MDL Reporting Units Dil. Spike Source Result %REC Limits RPD Limit

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Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: General

Project Number: [none]

Project Manager: Katrina Greene

Reported: 02/16/10 16:19

SAMPLE PREPARATION INFORMATION

Total Metals by EPA 200.8 (ICPMS)										
Prep: EPA 3015A					Sample	Default	RL Prep			
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor			
Batch: 1002154										
A10B071-01	Water	EPA 200.8	02/05/10 12:35	02/10/10 09:40	45mL/50mL	45mL/50mL	1.00			
			Conventional Chem	nistry Parameters						
Prep: EPA 1664					Sample	Default	RL Prep			
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor			
Batch: 1002108			· · · · · ·							
A10B071-01	Water	EPA 1664	02/05/10 12:35	02/06/10 07:48	1N/A/1N/A	1N/A/1mL	NA			
Prep: Method Prep: Aq					Sample	Default	RL Prep			
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor			
Batch: 1002103										
A10B071-01	Water	EPA 150.1	02/05/10 12:35	02/05/10 15:12	20mL/20mL	20mL/20mL	NA			
Prep: Total Suspe	nded Solids				Sample	Default	RL Prep			
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor			
Batch: 1002136										
A10B071-01	Water	SM 2540 D	02/05/10 12:35	02/09/10 10:24	1N/A/1N/A	1N/A/1mL	NA			

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Kinder Morgan Terminal 5

Project: General

15550 N Lombard Portland, OR 97203 Project Number: [none]

Project Manager: Katrina Greene

Reported: 02/16/10 16:19

Notes and Definitions

Oualifiers:

O-01

Result for total Hexane Extractable Material (HEM) is below reporting level for this sample. Silica Gel Treatment (HEM-SGT) analysis was therefore not performed.

Notes and Conventions:

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR

Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected. dry

Relative Percent Difference RPD

If MDL is not listed, data has been evaluated to the Method Reporting Limit only. MDL

WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.

Batch QC

Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Blank Policy Apex assesses blank data for potential high bias down to a level equal to 1/2 the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.

For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.

Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Allison Greiner For Darwin Thomas, Business Development Director

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Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: General

Project Number: [none]

Project Manager: Katrina Greene

Reported: 02/16/10 16:19

AICBO71 CMC 1-41 7-0022 1310 · COLS Production. RI ZAME TUUT AL Sb. As the Sc. (Ce, Ce, Ce, Ce, Fe, 1 Jig. Mg. Mn. Ma. Me Mg. Mg. Ma. My. M. M (६६) संकाम्बर शामिक्स BCRA Mainb ist SEGS Chier. Peal CHAIN OF CUSTODY MON TEO! eringini Palif 400A 0888 ह्यका संबंध AOC RICH KRIDN ADCT RIEX CTRALLY V 12332 S. B. Guiden Phins, Tigmil, OR 97223 Ph; 563-718-2323 Fax: 563-716-3333 AGHITMA **GEOH-HELLIN** S OE CONTAINERS XIXLIVIN SUAY BVIL SVLE 4 DAY FOR ID a TAT Requested (circle) Shermulati

Apex Laboratories

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Friday, March 5, 2010

Katrina Greene Kinder Morgan Terminal 5 15550 N Lombard Portland, OR 97203

RE: General / [none]

Enclosed are the results of analyses for work order <u>A10B241</u>, which was received by the laboratory on 2/24/2010 at 1:40:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: <u>AGreiner@Apex-Labs.com</u>, or by phone at 503-718-2323.

Apex Laboratories

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Allison Greiner For Darwin Thomas, Business Development Director

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Kinder Morgan Terminal 5

Project: General

15550 N Lombard

Portland, OR 97203

Project Number: [none]

Project Manager: Katrina Greene

Reported: 03/05/10 11:49

ANALYTICAL REPORT FOR SAMPLES

	SA	MPLE INFORMATI	ON		
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	
Storm Water	A10B241-01	Water	02/24/10 11:50	02/24/10 13:40	

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Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: General

Project Number: [none]

oject Number: [none]

Reported:

Project Manager: Katrina Greene 03/05/10 11:49

ANALYTICAL SAMPLE RESULTS

		То	tal Metals by EP	A 200.8 ((ICPMS)			
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Storm Water (A10B241-01)			Matrix: Water		Batch: 10024	16		
Copper	0.00414		0.00400	mg/L	1	02/26/10 15:07	EPA 200.8	
Lead	ND		0.00100	**	**	#1	n	
Zinc	0.0529		0.00400	tt	"	**	"	

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Allison Greiner For Darwin Thomas, Business Development Director

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Kinder Morgan Terminal 5

15550 N Lombard

Portland, OR 97203

Project: General

Project Number: [none] Project Manager: Katrina Greene

Reported: 03/05/10 11:49

ANALYTICAL SAMPLE RESULTS

		Cor	ventional Cher	nistry Pa	rameters			
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Storm Water (A10B241-01)			Matrix: Water		Batch: 100237	79		
HEM (Oil and Grease)	ND		4.67	mg/L	1	02/25/10 10:52	EPA 1664	O-0
рН	6.92			pH Units	H	02/24/10 15:52	EPA 150.1	
pH Temperature (deg C)	19.8			**	"	**	n	
Total Suspended Solids	ND		5.00	mg/L	**	02/26/10 12:00	SM 2540 D	

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Allison Greiner For Darwin Thomas, Business Development Director

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard

Portland, OR 97203

Project: General

Project Number: [none]

Project Manager: Katrina Greene

Reported:

03/05/10 11:49

QUALITY CONTROL (QC) SAMPLE RESULTS

			Total	Metals by	EPA 20	0.8 (ICPMS	5)					
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1002416 - EPA 30	15A						Wat	ter				
Blank (1002416-BLK1)				Pro	parcd: 02/	25/10 14:19	Analyzed:	02/26/10 1	3:56			
EPA 200.8												
Copper	ND		0.00400	mg/L	1							
Lead	ND		0.00100	"	"							
Zinc	ND		0.00400	**	"							
LCS (1002416-BS1)				Pro	parcd: 02/	25/10 14:19	Analyzed:	02/26/10 1	3:59			
EPA 200.8			******									
Copper	0.0545		0.00400	mg/L	1	0.0556		98	85-115%			
Lead	0.0546		0.00100	"	"	Ħ		98	"			
Zinc	0.0558		0.00400	"	11	11		100	11			

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Kinder Morgan Terminal 5

Project: General

15550 N Lombard Portland, OR 97203

Project Number: [nonc]

Project Manager: Katrina Greene

Reported: 03/05/10 11:49

QUALITY CONTROL (QC) SAMPLE RESULTS

			Conve	ntional Cl	nemistry	Paramete	rs					
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1002379 - EPA 1664							Wat	er				
Blank (1002379-BLK1)				Pro	epared: 02/	24/10 08:20	Analyzed:	02/24/10 16	:13			
EPA 1664												
HEM (Oil and Grease)	ND		5.00	mg/L	1							
LCS (1002379-BS1)				Pro	epared: 02/	24/10 08:20	Analyzed:	02/24/10 16	:13			
EPA 1664												
HEM (Oil and Grease)	40.6			mg/L	1	40.0		102	78-114%			

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Kinder Morgan Terminal 5

Project: General

15550 N Lombard Portland, OR 97203 Project Number: [none]

Project Manager: Katrina Greene

Reported: 03/05/10 11:49

QUALITY CONTROL (QC) SAMPLE RESULTS

			Conve	entional Ch	emistry	Paramete	ers					
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1002382 - Method P	rep: Aq						Wate	er				
Reference (1002382-SRM1)				Pre	oared: 02/	24/10 08:31	Analyzed: 0	2/24/10 0	9:39			
EPA 150.1												
pH	6.00			pH Units	1	6.00		100 9	8.4-101.7%			
Reference (1002382-SRM2)				Рте	oared: 02/	24/10 08:31	Analyzed: 0	2/24/10 10	0:05			
EPA 150.1												
pH	7.94			pH Units	1	8.00		99 38	.74-101.26%	4		
Reference (1002382-SRM3)				Pre	oared: 02/2	24/10 08:31	Analyzed: 0	2/24/10 10	0:19			
EPA 150.1												
рН	6.03			pH Units	1	6.00		100 9	8.4-101.7%			
Reference (1002382-SRM4)				Pre	pared: 02/2	24/10 08:31	Analyzed: 0	2/24/10 1:	5:50			
EPA 150.1												
pH	7.91			pH Units	1	8.00		99 38	.74-101.26%	·		
Reference (1002382-SRM5)				Prej	oared: 02/2	24/10 08:31	Analyzed: 0	2/24/10 1:	5:54			
EPA 150.1												
рН	5.98			pH Units	1	6.00		100 9	8.4-101.7%			

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Kinder Morgan Terminal 5

15550 N Lombard

Portland, OR 97203

Project: General

Project Number: [none]

Project Manager: Katrina Greene

Reported:

03/05/10 11:49

QUALITY CONTROL (QC) SAMPLE RESULTS

			Conve	ntional Cl	hemistry	/ Paramete	rs				_	
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1002422 - Total Si	uspended So	lids					Wat	ter				
Blank (1002422-BLK1)				Pro	epared: 02/	/26/10 08:39	Analyzed:	02/26/10 1	2:00			
SM 2540 D												
Total Suspended Solids	ND		5.00	mg/L	1							
Reference (1002422-SRM1)				Pro	epared: 02/	26/10 08:39	Analyzed:	02/26/10 1	2:00			
SM 2540 D												
Total Suspended Solids	91.0			mg/L	1	100		91	90-110%			

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Kinder Morgan Terminal 5

Project: General

15550 N Lombard Portland, OR 97203

Project Number: [none]
Project Manager: Katrina Greene

Reported: 03/05/10 11:49

SAMPLE PREPARATION INFORMATION

			Total Metals by EP	PA 200.8 (ICPMS)			
Prep: EPA 3015A					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1002416							
A10B241-01	Water	EPA 200.8	02/24/10 11:50	02/25/10 14:19	45mL/50mL	45mL/50mL	1.00
			Conventional Chem	nistry Parameters			
Prep: EPA 1664					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1002379							
A10B241-01	Water	EPA 1664	02/24/10 11:50	02/24/10 13:00	1N/A/1N/A	1N/A/1mL	NA
Prep: Method Prep	o: Aq				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1002382							•
A10B241-01	Water	EPA 150.1	02/24/10 11:50	02/24/10 15:00	20mL/20mL	20mL/20mL	NA
Prep: Total Susper	nded Solids				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1002422 A10B241-01	Water	SM 2540 D	02/24/10 11:50	02/26/10 08:39	1N/A/1N/A	1N/A/1mL	NA

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Kinder Morgan Terminal 5

Project: General

15550 N Lombard Portland, OR 97203 Project Number: [none]

Project Manager: Katrina Greene

Reported: 03/05/10 11:49

Notes and Definitions

Qualifiers:

O-01

Result for total Hexane Extractable Material (HEM) is below reporting level for this sample. Silica Gel Treatment (HEM-SGT) analysis was therefore not performed.

Notes and Conventions:

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.

RPD Relative Percent Difference

MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.

WMSC Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.

Batch QC

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Blank Policy Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.

For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.

Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualified results reported below the MRL.

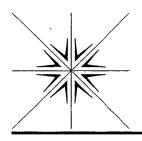
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Kinder Morgan Terminal 5Project:General15550 N LombardProject Number:[none]Reported:Portland, OR 97203Project Manager:Katrina Greene03/05/10 11:49

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SAAMPLES ARE HELD FOR 30 DAYS	ARE HEL	1.08 %	DAYS																		
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Apex Laboratories



11711 SE Capps Road Clackamas, OR 97015 (503) 607-1331 Fax (503) 607-1336

TO: Whom it May Concern

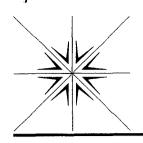
RE: December 2009 Storm Water Sampling- Kinder Morgan T-5 Portland, OR

Specialty Analytical collected storm water samples on 12/16/2009 and 12/30/2009. Due to laboratory error in processing the final reports, the results from the 16 December 2009 sampling were provided to the client after the results from the 30 December 2009 sampling. There was an apparent exceedence on the 16 December samples; however, the client was not in receipt of this information until 15 January 2010, when the sample results were provided to the client. Any lapse in reporting the exceedence is due to the lag in receipt of sample results from the laboratory.

Please contact us if there are any further questions on this issue.

Sincerely,

Marty French Lab Director



11711 SE Capps Road Clackamas, OR 97015 (503) 607-1331 Fax (503) 607-1336

January 15, 2010

Jack Waller Kinder Morgan Bulk Terminal #5 15550 N. Lombard Portland, OR 97203

TEL: (503) 285-4500 FAX: (503) 285-7733

RE: Storm Water Fall '09

Dear Jack Waller:

Order No.: 0912221

Specialty Analytical received 1 sample on 12/31/2009 for the analyses presented in the following report.

REVISED REPORT VERSION 1. Please see case narrative for information on revision.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

Project Manager

Technical Review

Date: 15-Jan-10

CLIENT:

Kinder Morgan Bulk Terminal #5

Project:

Storm Water Fall '09

Lab Order:

0912221

CASE NARRATIVE

Report Revision 1.

Data was reviewed and corrected values are included for zinc by EPA 200.7.

Date: 15-Jan-10

CLIENT:

Kinder Morgan Bulk Terminal #5

Project:

Storm Water Fall '09

Lab Order:

0912221

Lab ID:

0912221-01

Collection Date: 12/31/2009 8:41:00 AM

Client Sample ID: Storm Water				Matri	x: STOR	M WATER
Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS		E200.7				Analyst: zau
Chromium	0.00940	0.00500		mg/L	1	1/5/2010 5:44:12 PM
Copper	ND	0.0100		mg/L	1	1/5/2010 5:44:12 PM
Lead	ND	0.0200		mg/L	1	1/5/2010 5:44:12 PM
Zinc	0.0863	0.0100		mg/L	1	1/5/2010 5:44:12 PM
E.COLI.		SM9221F				Analyst: kh
E.coli	4.10	2.00		MPN/100ml	1	12/31/2009 10:00:00 AM
PH - FIELD DETERMINATION		M4500-H				Analyst: mjf
Hq	6.7			pH Units	1	12/31/2009
POLAR/NON-POLAR OIL AND GREASE		E1664				Analyst: jrp
HEM (Total Hexane Extractable Material)	ND	5.00		mg/L	1	1/5/2010
TOTAL PHOSPHATE AS P IN WATER		E365.2				Analyst: en
Phosphorus, Total	0.0782	0.0200		mg/L	1	1/6/2010
TOTAL SUSPENDED SOLIDS		E160.2				Analyst: en
Total Suspended Solids	39.0	5.00		mg/L	1	1/4/2010

Date: 15-Jan-10

CLIENT:

Kinder Morgan Bulk Terminal #5

Work Order:

0912221

Project:

Storm Water Fall '09

ANALYTICAL QC SUMMARY REPORT

TestCode: 1664_SPE

Sample ID: MB-R59130 Client ID: ZZZZZ	SampType: Batch ID:		TestCode: 160 TestNo: E1	_	Units: mg/L		Prep Dal Analysis Dal		0	Run ID: WE SeqNo: 650	_	0105B
Analyte		Result	PQL SPK	(value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
HEM (Total Hexane Extractable	e Materia	ND	5.00									
Sample ID: LCS-R59130 Client ID: ZZZZZ	SampType: Batch ID:		TestCode: 16	_	Units: mg/L		Prep Da Analysis Da		0	Run ID: WE SeqNo: 650	_	0105B
Analyte		Result	PQL SPK	< value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
HEM (Total Hexane Extractable	e Materia	33.4	5.00	40	0	83.5	78	114	0	0		
Sample ID: LCSD-R59130 Client ID: ZZZZZ	SampType: Batch ID:		TestCode: 16 TestNo: E1	_	Units: mg/L		Prep Da Analysis Da		0	Run ID: WE SeqNo: 650	_	0105B
Analyte		Result	PQL SPK	(value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
HEM (Total Hexane Extractable	e Materia	36	5.00	40	0	90	78	114	33.4	7.49	20	

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

Kinder Morgan Bulk Terminal #5

Work Order:

0912221

Project:

Storm Water Fall '09

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID:	MBLK-24722	SampType:	MBLK	TestCod	de: 200.7	Units: mg/L		Prep Dat	e: 1/4/201	0	Run ID: TJA	A IRIS_10010)5E
Client ID:	ZZZZZ	Batch ID:	24722	Test	lo: E200.7			Analysis Date	e: 1/5/201	0	SeqNo: 650	880	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium			ND	0.00500							-		
Copper			ND	0.0100									
Lead			ND	0.0200									
Zinc			0.0018	0.0100									J
Sample ID:	LCS-24722	SampType:	LCS	TestCod	de: 200. 7	Units: mg/L		Prep Dat	e: 1/ 4/201	0	Run ID: TJ/	A IRIS_10010)5E
Client ID:	ZZZZZ	Batch ID:	24722	Testi	lo: E200.7			Analysis Date	e: 1/5/201	0	SeqNo: 650	881	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium			0.2822	0.00500	0.25	0	113	93.9	113	0	0		
Copper			0.5386	0.0100	0.5	0	108	89.7	117	0	0		
Sample ID:	LCS-24722	SampType:	LCS	TestCo	de: 200.7	Units: mg/L		Prep Dat	e: 1/4/201	0	Run ID: TJ/	A IRIS_10010)5E
Client ID:	ZZZZZ	Batch ID:	24722	Testi	No: E200.7			Analysis Dat	e: 1/6/201	0	SeqNo: 651	040	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	-		1.039	0.0200	1	0	104	93.1	112	0	0		
Zinc			0.518	0.0100	0.5	0.0018	103	92.3	111	0	0		
Sample ID:	0912227-01BMS	SampType:	MS	TestCo	de: 200.7	Units: mg/L		Prep Dat	e: 1/ 4/20 1	0	Run ID: TJ	A IRIS_1001)5E
0								Analysis Dat	e: 1/5/201	0	SeqNo: 650	1884	
Client ID:		Batch ID:	24722	Testi	No: E200.7			Allalysis Dat	e. 1/3/201				
Client ID: Analyte	22222	Batch ID:	24722 Result	Testi PQL		SPK Ref Val	%REC	LowLimit		RPD Ref Val	%RPD	RPDLimit	Qual
		Batch ID:				SPK Ref Val		•			,		Qual
Analyte		Batch ID:	Result	PQL	SPK value		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD		Qual
Analyte Chromium		Batch ID:	Result 0.3281	PQL 0.00500	SPK value	0.061	%REC	LowLimit 93.4	HighLimit	RPD Ref Val	%RPD		Qual

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

Kinder Morgan Bulk Terminal #5

Work Order:

0912221

Project:

Storm Water Fall '09

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID:	0912227-01BMSD	SampType: N	MSD	TestCod	de: 200.7	Units: mg/L		Prep Date	e: 1/4/201	0	Run ID: TJ/	A IRIS_10010	05E
Client ID:	ZZZZZ	Batch ID: 2	24722	Test	No: E200.7			Analysis Date	e: 1/5/201	0	SeqNo: 650	885	
Analyte		ı	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium		(0.3246	0.00500	0.25	0.061	105	93.4	112	0.3281	1.07	20	
Copper		C	0.5611	0.0100	0.5	0.0389	104	92.7	114	0.5502	1.96	20	
Lead			1.116	0.0200	1	0	112	91.9	112	1.107	0.810	20	
Zinc			16.68	0.0100	0.5	16.97	-58	93	110	16.69	0.0599	20	S,MC
Sample ID:	0912227-01BDUP	SampType: D	DUP	TestCod	de: 200 .7	Units: mg/L		Prep Dat	e: 1/4/201	0	Run ID: TJ/	A IRIS_10010	05E
Client ID:	ZZZZZ	Batch ID: 2	24722	Testh	No: E200.7			Analysis Date	e: 1/5/201	0	SeqNo: 650	883	
Analyte		1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium		(0.0617	0.00500	0	0	0	0	0	0.061	1.14	20	
Copper			0.038	0.0100	0	0	0	0	0	0.0389	2.34	20	
Lead			ND	0.0200	0	0	0	0	0	0	0	20	
Zinc			16.4	0.0100	0	0	0	0	0	16.97	3.42	20	
Sample ID:	ccv	SampType: 0	CCV	TestCod	de: 200. 7	Units: mg/L		Prep Dat	e:		Run ID: TJ	A IRIS_10010	05E
Client ID:	ZZZZZ	Batch ID: 2	24722	Test!	No: E200.7			Analysis Date	e: 1/5/201	0	SeqNo: 650	1879	
Analyte		i	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium		(0.2508	0.00500	0.25	0	100	90	110	0	0		
Copper		C	0.4879	0.0100	0.5	0	97.6	90	110	0	0		
Lead			1.011	0.0200	1	0	101	90	110	0	0		
Zinc		(0.5058	0.0100	0.5	0	101	90	110	0	0		
Sample ID:	ccv	SampType: 0	CCV	TestCo	de: 200.7	Units: mg/L		Prep Dat	e:		Run ID: TJ	A IRIS_10010	05E
Client ID:	ZZZZZ	Batch ID: 2	24722	Test	No: E200.7			Analysis Dat	e: 1/5/201	0	SeqNo: 650	888	
Analyte		1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium		(0.2616	0.00500	0.25	0	105	90	110	0	0		
_			0.495	0.0100	0.5	0	99	90	110	0	0		
Copper													
Copper Lead	•		1.051	0.0200	1	0	105	90	110	0	. 0		

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

Kinder Morgan Bulk Terminal #5

Work Order:

0912221

Project:

Storm Water Fall '09

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID: CCV Client ID: ZZZZZ	SampType: Batch ID:			de: 200.7 No: E200.7	Units: mg/L		Prep Dat Analysis Dat		0	Run ID: TJ/ SeqNo: 650		05E
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium		0.2648	0.00500	0.25	0	106	90	110	0	0		
Copper		0.4928	0.0100	0.5	0	98.6	90	110	0	0		
Lead		1.048	0.0200	1	0	105	90	110	0	0		
Zinc		0.5281	0.0100	0.5	0	106	90	110	0	0		
Sample ID: CCV	SampType:	CCV	TestCo	de: 200. 7	Units: mg/L		Prep Dat	e:		Run ID: TJ/	A IRIS_1001	05E
Client ID: ZZZZZ	Batch ID:	24722	Testi	No: E200.7			Analysis Dat	e: 1/6/201	0	SeqNo: 651	1041	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		1.021	0.0200	1	0	102	90	110	0	0		
Zinc		0.5075	0.0100	0.5	0	102	90	110	0	0		
Sample ID: ICV	SampType:	ICV	TestCo	de: 200.7	Units: mg/L		Prep Dat	e:		Run ID: TJ	A IRIS_1001	05E
Client ID: ZZZZZ	Batch ID:	24722	Testi	No: E200.7			Analysis Dat	e: 1/5/201	0	SeqNo: 650	0878	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium		0.2552	0.00500	0.25	0	102	95	105	0	0		
Copper		0.4923	0.0100	0.5	0	98.5	95	105	0	0		
Lead		1.006	0.0200	1	0	101	95	105	0	0		
Zinc		0.5067	0.0100	0.5	0	101	95	105	0	0		
Sample ID: ICV	SampType:	ICV	TestCo	de: 200. 7	Units: mg/L		Prep Dat	te:		Run ID: TJ	A IRIS_1001	05E
Client ID: ZZZZZ	Batch ID:	24722	Testi	No: E200.7			Analysis Dat	e: 1/6/201	10	SeqNo: 65	1039	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		1.031	0.0200	1	0	103	95	105	0	0		
Loug												

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Page 4 of 6

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

Kinder Morgan Bulk Terminal #5

Work Order:

0912221

Project:

Storm Water Fall '09

ANALYTICAL QC SUMMARY REPORT

TestCode: P-TOTAL

Sample ID: MB-R59136 Client ID: ZZZZZ	SampType: MBLK Batch ID: R59136	TestCode: P-TOTAL TestNo: E365.2	Units: mg/L	Prep Date: Analysis Date: 1/6/2010	Run ID: GENESIS-1_100106A SeqNo: 650990
Analyte	Result	PQL SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Phosphorus, Total	ND	0.0200			
Sample ID: LCS-R59136 Client ID: ZZZZZ	SampType: LCS Batch ID: R59136	TestCode: P-TOTAL TestNo: E365.2	Units: mg/L	Prep Date: Analysis Date: 1/6/2010	Run ID: GENESIS-1_100106A SeqNo: 650989
Analyte	Result	PQL SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Phosphorus, Total	0.7536	0.0200 0.8143	0	92.5 82.1 110 0	0
Sample ID: 0912209-02DMS	SampType: MS	TestCode: P-TOTAL	Units: mg/L	Prep Date:	Run ID: GENESIS-1_100106A
Sample ID: 0912209-02DMS Client ID: ZZZZZ	SampType: MS Batch ID: R59136	TestCode: P-TOTAL TestNo: E365.2	Units: mg/L	Prep Date: Analysis Date: 1/6/2010	Run ID: GENESIS-1_100106A SeqNo: 650984
,			Units: mg/L SPK Ref Val	•	-
Client ID: ZZZZZ	Batch ID: R59136	TestNo: E365.2	Ū	Analysis Date: 1/6/2010	SeqNo: 650984
Client ID: ZZZZZ Analyte	Batch ID: R59136 Result	TestNo: E365.2 PQL SPK value	SPK Ref Val	Analysis Date: 1/6/2010 %REC LowLimit HighLimit RPD Ref Val	SeqNo: 650984 %RPD RPDLimit Qual
Client ID: ZZZZZ Analyte Phosphorus, Total Sample ID: 0912209-02DMSD	Batch ID: R59136 Result 0.3348 SampType: MSD	TestNo: E365.2 PQL SPK value 0.0200 0.3257 TestCode: P-TOTAL	SPK Ref Val 0.0342	Analysis Date: 1/6/2010 %REC LowLimit HighLimit RPD Ref Val 92.3 77.2 117 0 Prep Date:	SeqNo: 650984 %RPD RPDLimit Qual 0 Run ID: GENESIS-1_100106A

B - Analyte detected in the associated Method Blank

Kinder Morgan Bulk Terminal #5

Work Order:

0912221

Project:

Storm Water Fall '09

ANALYTICAL QC SUMMARY REPORT

TestCode: TSS_WW

	··											
Sample ID: MB-R59112	SampType: N	IBLK	TestCode	: TSS_WW	Units: mg/L		Prep Date	ə:		Run ID: WE	TCHEM_100)104B
Client ID: ZZZZZ	Batch ID: R	R59112	TestN	o: E160.2			Analysis Date	e: 1/4/201	0	SeqNo: 650	728	
Analyte	1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Suspended Solids		ND	5.00									
Sample ID: LCS-R59112	SampType: L	.cs	TestCode	e: TSS_WW	Units: mg/L		Prep Date	9:		Run ID: WE	TCHEM_100)104B
Client ID: ZZZZZ	Batch ID: R	R59112	TestN	o: E160.2			Analysis Date	e: 1/4/201	0	SeqNo: 650	727	
Analyte	1	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Suspended Solids		94	5.00	100	0	94	80	105	0	0		
Sample ID: 0912221-01CDUP	SampType: D	DUP	TestCode	e: TSS_WW	Units: mg/L		Prep Date	 ================================		Run ID: WE	TCHEM_100	0104B
Client ID: Storm Water	Batch ID: F	R59112	TestN	o: E160.2			Analysis Date	e: 1/4/201	0	SeqNo: 650	721	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Total Suspended Solids		43	5.00	0	0	0	0	0	39	9.76	20	
Complete A0040040 04PDUD			T40-d	TCC MAN	United week	-	Prep Date	<u> </u>		Run ID: WE	TCHEM_100	0104B
Sample ID: A0912210-01BDUP	SampType: D	JUP	i esicodi	e: TSS_WW	Units: mg/L		Frep Date	5.		rtan ib. tre		7.0 7.5
Client ID: ZZZZZ	Samp i ype: L Batch ID: F			o: E160.2	Onits: mg/L		Analysis Date		0	SeqNo: 656	_	71045
•	Batch ID: F			_	SPK Ref Val	%REC	-				_	Qual

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

KEY TO FLAGS

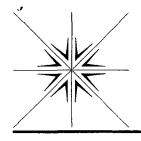
- A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards.
- A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
- A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- B The blank exhibited a positive result greater than the reporting limit for this compound.
- CN See Case Narrative.
- D Result is based from a dilution.
- E Result exceeds the calibration range for this compound. The result should be considered as estimate.
- F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- H Sample was analyzed outside recommended hold time.
- HT At clients request, sample was analyzed outside recommended hold time.
- J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
- K Diesel result is biased high due to amount of Oil contained in the sample.
- L Diesel result is biased high due to amount of Gasoline contained in the sample.
- M Oil result is biased high due to amount of Diesel contained in the sample.
- N Gasoline result is biased high due to amount of Diesel contained in the sample.
- MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
- MI Result is outside control limits due to matrix interference.
- MSA Value determined by Method of Standard Addition.
- O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
- P Detection levels of Methylene Chloride may be laboratory contamination, due to previous analysis or background levels.
- Q Detection levels elevated due to sample matrix.
- R RPD control limits were exceeded.
- RF Duplicate failed due to result being at or near the method-reporting limit.
- RP Matrix spike values exceed established QC limits, post digestion spike is in control.
- S Recovery is outside control limits.
- SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
- * The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

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Rush Analys	ses Must B	e Scheduled Witl	h The Lab In Adva	ance		S	12]]			Specialty An	alytical T	rip Blanks?	Y/N
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Relinquished Company:	BY		Date	Time	Received Company	-		 ,				1	nquisho npany:	ed By:				Date	Time
Unless Recla	beyond 60 c	ples Will Be Dispo days subject to stor	sed of 60 Days Aff age fee(s)	ter Receipt.								Rec	eived F	or Lal	b By:	eltin		Date 12/31/09	Time
Copies: White	-Original	Vellow-Pr	rainet Fila	Dink (Cuata								1 1/4		L	LIV		1140110	100

Yellow-Project File

Pink-Customer Copy

Copies: White-Original



11711 SE Capps Road Clackamas, OR 97015 (503) 607-1331 Fax (503) 607-1336

December 28, 2009

Jack Waller Kinder Morgan Bulk Terminal #5 15550 N. Lombard Portland, OR 97203

TEL: (503) 285-4500 FAX: (503) 285-7733

RE: Storm Water

Dear Jack Waller: Order No.: 0912192

Specialty Analytical received 1 sample on 12/16/2009 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Project Manager

Technical Review

Date: 15-Jan-10

CLIENT: Lab Order: Kinder Morgan Bulk Terminal #5

0912192

Project:

Storm Water

Lab ID:

0912192-01

Client Sample ID: Storm Water

Collection Date: 12/16/2009 9:25:00 AM

Matrix: STORM WATER

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
ICP METALS		E200.7				Analyst: zau
Chromium	0.00580	0.00500		mg/L	1	12/17/2009
Copper	0.104	0.0100		mg/L	1	12/17/2009
Lead	0.016	0.0200	J	mg/L	1	12/17/2009
Zinc	0.642	0.0100		mg/L	1	12/17/2009
E.COLI.		SM9221F				Analyst: jrp
E.coli	46.2	2.00		MPN/100ml	1	12/16/2009 4:25:00 PM
PH - FIELD DETERMINATION		M4500-H				Analyst: mjf
pH	6.8			pH Units	1	12/16/2009
POLAR/NON-POLAR OIL AND GREASE		E1664				Analyst: jrp
HEM (Total Hexane Extractable Material)	6.20	5.00		mg/L	1	12/22/2009
TOTAL PHOSPHATE AS P IN WATER		E365.2				Analyst: en
Phosphorus, Total	0.246	0.0200		mg/L	1	12/22/2009
TOTAL SUSPENDED SOLIDS		E160.2				Analyst: en
Total Suspended Solids	26.0	5.00		mg/L	1	12/18/2009

Date: 15-Jan-10

CLIENT:

Kinder Morgan Bulk Terminal #5

Work Order:

0912192

Project: Storm Water

ANALYTICAL QC SUMMARY REPORT

TestCode: 1664_SPE

Sample ID: Client ID:	MB-R58923 ZZZZZ	SampType: Batch ID:			: 1664_SPE : E1664	Units: mg/L		Prep Da Analysis Da		2009	Run ID: WE SeqNo: 647	TCHEM_09	1222A
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
HEM (Total	Hexane Extractable	e Materia	0.9	5.00									J
·	LCS-R58923 ZZZZZ	SampType: Batch ID:			: 1664_SPE : E1664	Units: mg/L		Prep Da Analysis Da		2009	Run ID: WE SeqNo: 647	TCHEM_09	1222A
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
HEM (Total	Hexane Extractable	e Materia	33.8	5.00	40	0.9	82.2	78	114	0	0		
· ·	LCSD-R58923 ZZZZZ	SampType: Batch ID:			: 1664_SPE	Units: mg/L		Prep Da Analysis Da		2009	Run ID: WE	TCHEM_09	1222A
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
HEM (Total	Hexane Extractable	e Materia	33	5.00	40	0.9	80.2	78	114	33.8	2.40	20	

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

Kinder Morgan Bulk Terminal #5

Work Order:

Project:

0912192

Storm Water

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

ult PQL ND 0.00500 ND 0.0100 ND 0.0200 ND 0.0100 TestCo 15 Test ult PQL 73 0.00500 52 0.0100 23 0.0200 51 0.0100 TestCo	spk value 200.7 tho: E200.7 tho: E200.7 spk value 0.25 0.5 1 0.5 ode: 200.7	SPK Ref Val Units: mg/L SPK Ref Val 0 0 0 0 Units: mg/L	%REC	Prep Date Analysis Date LowLimit 93.9 89.7 93.1 92.3	e: 12/17/2 e: 12/17/2 HighLimit 113 117 112 111	RPD Ref Val 2009 RPD Ref Val 0 0 0 0	SeqNo: 646 %RPD Run ID: TJ/ SeqNo: 646 %RPD 0 0 0	RPDLimit A IRIS_09121 6247 RPDLimit	Qual
ND 0.00500 ND 0.0100 ND 0.0200 ND 0.0100 TestCo 15 Test ult PQL 73 0.00500 52 0.0100 23 0.0200 51 0.0100 TestCo	ode: 200.7 tNo: E200.7 SPK value 0.25 0.5 1 0.5	Units: mg/L SPK Ref Val 0 0 0	%REC 103 99 102	Prep Date Analysis Date LowLimit 93.9 89.7 93.1 92.3	e: 12/17/2 e: 12/17/2 HighLimit 113 117 112 111	2009 2009 RPD Ref Val 0 0 0	Run ID: TJ/ SeqNo: 646 %RPD 0 0 0	A IRIS_09121 6247 RPDLimit	7D Qual
ND 0.0100 ND 0.0200 ND 0.0100 TestCo 15 Test ult PQL 73 0.00500 52 0.0100 23 0.0200 51 0.0100 TestCo	SPK value 0.25 0.5 1 0.5	SPK Ref Val 0 0 0 0	%REC 103 99 102	Analysis Date LowLimit 93.9 89.7 93.1 92.3	HighLimit 113 117 112 111	RPD Ref Val 0 0 0 0	SeqNo: 646 %RPD 0 0 0 0	RPDLimit	Qual
ND 0.0200 ND 0.0100 TestCo 15 Test ult PQL 73 0.00500 52 0.0100 23 0.0200 51 0.0100 TestCo	SPK value 0.25 0.5 1 0.5	SPK Ref Val 0 0 0 0	%REC 103 99 102	Analysis Date LowLimit 93.9 89.7 93.1 92.3	HighLimit 113 117 112 111	RPD Ref Val 0 0 0 0	SeqNo: 646 %RPD 0 0 0 0	RPDLimit	Qual
TestCo TestCo 15 Test 10 0.00500 10 0.00500 10 0.0000 10 0.0000 TestCo TestCo	SPK value 0.25 0.5 1 0.5	SPK Ref Val 0 0 0 0	%REC 103 99 102	Analysis Date LowLimit 93.9 89.7 93.1 92.3	HighLimit 113 117 112 111	RPD Ref Val 0 0 0 0	SeqNo: 646 %RPD 0 0 0 0	RPDLimit	Qual
TestCo TestCo 15 Test 16 Test 17 TestCo 18 TestCo 18 TestCo 18 TestCo 18 TestCo	SPK value 0.25 0.5 1 0.5	SPK Ref Val 0 0 0 0	%REC 103 99 102	Analysis Date LowLimit 93.9 89.7 93.1 92.3	HighLimit 113 117 112 111	RPD Ref Val 0 0 0 0	SeqNo: 646 %RPD 0 0 0 0	RPDLimit	Qual
15 Test ult PQL 73 0.00500 52 0.0100 23 0.0200 51 0.0100 TestCo	SPK value 0.25 0.5 1 0.5	SPK Ref Val 0 0 0 0	%REC 103 99 102	Analysis Date LowLimit 93.9 89.7 93.1 92.3	HighLimit 113 117 112 111	RPD Ref Val 0 0 0 0	SeqNo: 646 %RPD 0 0 0 0	RPDLimit	Qual
ult PQL 73 0.00500 52 0.0100 23 0.0200 51 0.0100 TestCo	SPK value 0.25 0.5 1 0.5	0 0 0 0	%REC 103 99 102	93.9 89.7 93.1 92.3	HighLimit 113 117 112 111	RPD Ref Val 0 0 0 0	%RPD 0 0 0 0	RPDLimit	
73 0.00500 52 0.0100 23 0.0200 51 0.0100 TestCo	0.25 0.5 1 0.5	0 0 0 0	103 99 102	93.9 89.7 93.1 92.3	113 117 112 111	0 0 0 0	0 0 0 0		
52 0.0100 23 0.0200 51 0.0100 TestCo	0.5 1 0.5	0 0 0	99 102	89.7 93.1 92.3	117 112 111	0 0 0	0 0 0	A IDIC 2040	17D
23 0.0200 51 0.0100 TestCo	0.5	0	102	93.1 92.3	112 111	0	0	A IDIC 2042	
51 0.0100 TestCo		0		92.3	111	0	0	A IDIO 20404	
TestCo			101		•			A IDIS ASASA	
	ode: 200.7	Units: ma/L		·				A IDIC ASASA	17D
		- · · · · · · · · · · · · · · · · · · ·		Prep Dat	e: 12/17/2	2009	Run ID: TJ/	4 IKIS_U9121	170
5 Test	tNo: E200.7			Analysis Date	e: 12/17/2	2009	SeqNo: 646	5250	
ult PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
41 0.00500	0.25	0	106	93.4	112	0	0		
85 0.0100	0.5	0.0061	102	92.7	114	0	0		
53 0.0200	1	0	105	91.9	112	0	0		
92 0.0100	0.5	0.097	104	93	110	0	0		
) TestCo	ode: 200.7	Units: mg/L		Prep Dat	e: 12/17/2	2009	Run ID: TJ/	A IRIS_09121	17D
5 Test	tNo: E200.7			Analysis Date	e: 12/17/2	2009	SeqNo: 646	3251	
ult PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
56 0.00500	0.25	0	102	93.4	112	0.2641	3.27	20	
0.0100	0.5	0.0061	99.8	92.7	114	0.5185	2.64	20	
25 0.0200	1	0	103	91.9	112	1.053	2.69	20	
0.0100	0.5	0.097	101	93	110	0.6192	3.10	20	
	85 0.0100 53 0.0200 92 0.0100 TestCo 5 Tes ult PQL 56 0.00500 05 0.0100 25 0.0200	85 0.0100 0.5 53 0.0200 1 92 0.0100 0.5 TestCode: 200.7 TestNo: E200.7 ult PQL SPK value 56 0.00500 0.25 0.0100 0.5 25 0.0200 1	85 0.0100 0.5 0.0061 53 0.0200 1 0 92 0.0100 0.5 0.097 TestCode: 200.7 Units: mg/L 5 TestNo: E200.7 ult PQL SPK value SPK Ref Val 56 0.00500 0.25 0 05 0.0100 0.5 0.0061 25 0.0200 1 0	85 0.0100 0.5 0.0061 102 53 0.0200 1 0 105 92 0.0100 0.5 0.097 104 TestCode: 200.7 Units: mg/L 5 TestNo: E200.7 ult PQL SPK value SPK Ref Val %REC 56 0.00500 0.25 0 102 05 0.0100 0.5 0.0061 99.8 25 0.0200 1 0 103	85 0.0100 0.5 0.0061 102 92.7 53 0.0200 1 0 105 91.9 92 0.0100 0.5 0.097 104 93 TestCode: 200.7 Units: mg/L Prep Dat 15 TestNo: E200.7 Analysis Dat 16 0.00500 0.25 0 102 93.4 17 0.0100 0.5 0.0061 99.8 92.7 18 0.0200 1 0 103 91.9	85 0.0100 0.5 0.0061 102 92.7 114 63 0.0200 1 0 105 91.9 112 92 0.0100 0.5 0.097 104 93 110 TestCode: 200.7 Units: mg/L Prep Date: 12/17/2 15 TestNo: E200.7 Units: mg/L Analysis Date: 12/17/2 16 0.00500 0.25 0 102 93.4 112 17 05 0.0100 0.5 0.0061 99.8 92.7 114 18 0.00500 1 0 103 91.9 112	85 0.0100 0.5 0.0061 102 92.7 114 0 53 0.0200 1 0 105 91.9 112 0 92 0.0100 0.5 0.097 104 93 110 0 TestCode: 200.7 Units: mg/L Prep Date: 12/17/2009 Analysis Date: 12/17/2009 ult PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val 56 0.00500 0.25 0 102 93.4 112 0.2641 05 0.0100 0.5 0.0061 99.8 92.7 114 0.5185 25 0.0200 1 0 103 91.9 112 1.053	85 0.0100 0.5 0.0061 102 92.7 114 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	85 0.0100 0.5 0.0061 102 92.7 114 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Qualifiers:

ND - Not Detected at the Reporting Limit

Page 2 of 6

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

Kinder Morgan Bulk Terminal #5

Work Order:

0912192

Project:

Storm Water

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID: A0912115-02CDUP	• ••	TestCod	ie: 200.7	Units: mg/L		Prep Date			Run ID: TJA		7D
Client ID: ZZZZZ	Batch ID: 24605	Testi	lo: E200.7			Analysis Date	e: 12/17/2	009	SeqNo: 646	249	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	0.00500	0	0	0	0	0	0	0	20	
Copper	0.0073	0.0100	0	0	0	0	0	0.0061	0	20	J
Lead	ND	0.0200	0	0	0	0	0	0	0	20	
Zinc	0.0962	0.0100	0	0	0	0	0	0.097	0.828	20	
Sample ID: CCV	SampType: CCV	TestCo	de: 200.7	Units: mg/L		Prep Dat	e:		Run ID: TJA	IRIS_09121	7D
Client ID: ZZZZZ	Batch ID: 24605	Test	lo: E200.7			Analysis Dat	e: 12/17/2	009	SeqNo: 646	245	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	0.2491	0.00500	0.25	0	99.6	90	110	0	0		
Copper	0.4721	0.0100	0.5	0	94.4	90	110	0	0		
Lead	0.9884	0.0200	1	0	98.8	90	110	0	0		
Zinc	0.4974	0.0100	0.5	0	99.5	90	110	0	0		
Sample ID: CCV	SampType: CCV	TestCo	de: 200.7	Units: mg/L		Prep Dat	e:		Run ID: TJA	NIRIS_09121	7D
Client ID: ZZZZZ	Batch ID: 24605	Testi	No: E200.7			Analysis Dat	e: 12/17/2	009	SeqNo: 646	252	
		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Analyte	Result	FUL									
<u> </u>	0.2406	0.00500	0.25	0	96.2	90	110	0	0		
Chromium				0	96.2 96.1	90 90	110 110	0 0	0 0		
Chromium Copper	0.2406	0.00500	0.25	_				-			
Chromium Copper Lead	0.2406 0.4807	0.00500 0.0100	0.25 0.5	0	96.1	90	110	0	0		
	0.2406 0.4807 0.9894	0.00500 0.0100 0.0200 0.0100	0.25 0.5 1	0	96.1 98.9	90 90	110 110 110	0	0	A IRIS_0912	17D
Chromium Copper Lead Zinc Sample ID: CCV	0.2406 0.4807 0.9894 0.4939	0.00500 0.0100 0.0200 0.0100	0.25 0.5 1 0.5	0 0 0	96.1 98.9 98.8	90 90 90	110 110 110	0 0 0	0 0 0	_	17D
Chromium Copper Lead Zinc Sample ID: CCV Client ID: ZZZZZ	0.2406 0.4807 0.9894 0.4939 SampType: CCV	0.00500 0.0100 0.0200 0.0100	0.25 0.5 1 0.5 de: 200.7	0 0 0	96.1 98.9 98.8	90 90 90 Prep Dat Analysis Dat	110 110 110 e: e: 12/17/2	0 0 0	0 0 0 Run ID: TJ	_	7D Qual
Chromium Copper Lead Zinc Sample ID: CCV Client ID: ZZZZZ Analyte	0.2406 0.4807 0.9894 0.4939 SampType: CCV Batch ID: 24605	0.00500 0.0100 0.0200 0.0100 TestCoo	0.25 0.5 1 0.5 de: 200.7	0 0 0 Units: mg/L	96.1 98.9 98.8	90 90 90 Prep Dat Analysis Dat	110 110 110 e: e: 12/17/2	0 0 0	0 0 0 Run ID: TJ / SeqNo: 646	263	
Chromium Copper Lead Zinc Sample ID: CCV	0.2406 0.4807 0.9894 0.4939 SampType: CCV Batch ID: 24605 Result	0.00500 0.0100 0.0200 0.0100 TestCor TestI	0.25 0.5 1 0.5 de: 200.7 No: E200.7	0 0 0 Units: mg/L	96.1 98.9 98.8 %REC	90 90 90 Prep Dat Analysis Dat	110 110 110 e: e: 12/17/2	0 0 0	0 0 0 Run ID: TJ/ SeqNo: 646 %RPD	263	
Chromium Copper Lead Zinc Sample ID: CCV Client ID: ZZZZZ Analyte Chromium	0.2406 0.4807 0.9894 0.4939 SampType: CCV Batch ID: 24605 Result 0.2462	0.00500 0.0100 0.0200 0.0100 TestCor TestI PQL 0.00500	0.25 0.5 1 0.5 de: 200.7 No: E200.7 SPK value 0.25	0 0 0 Units: mg/L SPK Ref Val	96.1 98.9 98.8 %REC 98.5	90 90 90 Prep Dat Analysis Dat LowLimit 90	110 110 110 e: e: 12/17/2 HighLimit	0 0 0 0 0009 RPD Ref Val	0 0 0 Run ID: TJ/ SeqNo: 646 %RPD	263	

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

Kinder Morgan Bulk Terminal #5

Work Order:

0912192

Project:

Storm Water

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID: CCV	SampType:	CCV	TestCod	de: 200. 7	Units: mg/L		Prep Date			Run ID: TJ	A IRIS_0912	17D
Client ID: ZZZZZ	Batch ID:	24605	Test	No: E200.7			Analysis Date:	12/17/2	009	SeqNo: 646	6274	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium		0.2498	0.00500	0.25	0	99.9	90	110	0	0		
Copper		0.4731	0.0100	0.5	0	94.6	90	110	0	0		
Lead		0.9866	0.0200	1	0	98.7	90	110	0	0		
Zinc		0.4964	0.0100	0.5	0	99.3	90	110	0	0		
Sample ID: CCV	SampType:	ccv	TestCoo	de: 200.7	Units: mg/L		Prep Date			Run ID: TJ	A IRIS_0912	17D
Client ID: ZZZZZ	Batch ID:	24605	Test	No: E200.7			Analysis Date:	12/17/2	009	SeqNo: 640	6642	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Copper		0.4767	0.0100	0.5	0	95.3	90	110	0	0		
Lead		1.001	0.0200	1	0	100	90	110	0	0		
Zinc		0.5024	0.0100	0.5	0	100	90	110	0	0		
Sample ID: ICV	SampType:	ICV	TestCoo	de: 200.7	Units: mg/L		Prep Date	:	-	Run ID: TJ	 A IRIS_0912	17D
Client ID: ZZZZZ	Batch ID:	24605	Test	No: E200.7			Analysis Date	: 12/17/2	:009	SeqNo: 644	6244	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium		0.2574	0.00500	0.25	0	103	95	105	0	0		
Copper		0.5019	0.0100	0.5	0	100	95	105	0	0		
Lead		1.036	0.0200	1	0	104	95	105	0	0		
Zinc		0.5163	0.0100	0.5	0	103	95	105	0	0		

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

Kinder Morgan Bulk Terminal #5

Work Order:

0912192

Project:

Storm Water

ANALYTICAL QC SUMMARY REPORT

TestCode: P-TOTAL

									·			
Sample ID: MB-R58927	SampType:	MBLK	TestCoo	le: P-TOTAL	Units: mg/L		Prep Date	e:		Run ID: GE	NESIS-1_09	1222A
Client ID: ZZZZZ	Batch ID:	R58927	Testi	lo: E365.2			Analysis Date	e: 12/22/2	2009	SeqNo: 647	792	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total		ND	0.0200									
Sample ID: LCS-R58927	SampType:	LCS	TestCod	le: P-TOTAL	Units: mg/L		Prep Date	e:		Run ID: GE	NESIS-1_09	1222A
Client ID: ZZZZZ	Batch ID:	R58927	TestN	lo: E365.2			Analysis Date	e: 12/22/2	2009	SeqNo: 647	791	
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phosphorus, Total		0.7638	0.0200	0.8143	0	93.8	82.1	110	0	0		
									-			
Sample ID: 0912115-01BMS	SampType:			le: P-TOTAL	Units: mg/L		Prep Dat				NESIS-1_09	1222A
	SampType: Batch ID:	MS	TestCoo		-			e:				1222A
Sample ID: 0912115-01BMS		MS	TestCoo	le: P-TOTAL	-		Prep Date	e:		Run ID: GE		1222A Qual
Sample ID: 0912115-01BMS Client ID: ZZZZZ		MS R58927	TestCod TestN	le: P-TOTAL lo: E365.2	Units: mg/L		Prep Date	e: 12/22/2	2009	Run ID: GE SeqNo: 64	7776	
Sample ID: 0912115-01BMS Client ID: ZZZZZ Analyte		MS R58927 Result 0.323	TestCoo TestN PQL 0.0200	le: P-TOTAL lo: E365.2 SPK value	Units: mg/L SPK Ref Val	%REC	Prep Date Analysis Date LowLimit	e: e: 12/22/2 HighLimit 117	RPD Ref Val	Run ID: GE SeqNo: 64 %RPD	7776	Qual
Sample ID: 0912115-01BMS Client ID: ZZZZZ Analyte Phosphorus, Total	Batch ID:	MS R58927 Result 0.323	TestCoo TestN PQL 0.0200 TestCoo	le: P-TOTAL lo: E365.2 SPK value 0.3257	Units: mg/L SPK Ref Val 0	%REC 99.2	Prep Dat Analysis Dat LowLimit 77.2	e: e: 12/22/2 HighLimit 117	RPD Ref Val	Run ID: GE SeqNo: 64 %RPD	RPDLimit	Qual
Sample ID: 0912115-01BMS Client ID: ZZZZZ Analyte Phosphorus, Total Sample ID: 0912115-01BMSD	Batch ID:	MS R58927 Result 0.323	TestCoo TestN PQL 0.0200 TestCoo	le: P-TOTAL lo: E365.2 SPK value 0.3257 de: P-TOTAL	Units: mg/L SPK Ref Val 0	%REC 99.2	Prep Date Analysis Date LowLimit 77.2 Prep Date	e: e: 12/22/2 HighLimit 117	0009 RPD Ref Val 0	Run ID: GE SeqNo: 64 %RPD 0 Run ID: GE	RPDLimit	Qual

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

Kinder Morgan Bulk Terminal #5

Work Order:

0912192

Project:

Storm Water

ANALYTICAL QC SUMMARY REPORT

TestCode: TSS_WW

Sample ID: MB-R58882 Client ID: ZZZZZ	SampType: MBLK Batch ID: R58882	TestCode: TSS_WW Units: mg/L TestNo: E160.2	Prep Date: 12/18/2009 Analysis Date: 12/18/2009	Run ID: WETCHEM_091218C SeqNo: 647126
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Total Suspended Solids	ND	5.00		
Sample ID: LCS-R58882 Client ID: ZZZZZ	SampType: LCS Batch ID: R58882	TestCode: TSS_WW Units: mg/L TestNo: E160.2	Prep Date: 12/18/2009 Analysis Date: 12/18/2009	Run ID: WETCHEM_091218C SeqNo: 647125
Analyte	Result	PQL SPK value SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val	%RPD RPDLimit Qual
Total Suspended Solids	100	5.00 100 0	100 80 105 0	0
				
Sample ID: 0912109-02ADUP Client ID: ZZZZZ	SampType: DUP Batch ID: R58882	TestCode: TSS_WW Units: mg/L TestNo: E160.2	Prep Date: 12/18/2009 Analysis Date: 12/18/2009	Run ID: WETCHEM_091218C SeqNo: 647113
,	. 21	_	•	_
Client ID: ZZZZZ	Batch ID: R58882	TestNo: E160.2	Analysis Date: 12/18/2009	SeqNo: 647113
Client ID: ZZZZZ Analyte	Batch ID: R58882 Result	TestNo: E160.2 PQL SPK value SPK Ref Val	Analysis Date: 12/18/2009 %REC LowLimit HighLimit RPD Ref Val	SeqNo: 647113 %RPD RPDLimit Qual
Client ID: ZZZZZ Analyte Total Suspended Solids Sample ID: 0912117-01BDUP	Batch ID: R58882 Result 56 SampType: DUP	TestNo: E160.2 PQL SPK value SPK Ref Val 5.00 0 0 TestCode: TSS_WW Units: mg/L	Analysis Date: 12/18/2009 %REC LowLimit HighLimit RPD Ref Val 0 0 0 52 Prep Date: 12/18/2009	SeqNo: 647113 %RPD RPDLimit Qual 7.41 20 Run ID: WETCHEM_091218C

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

KEY TO FLAGS

- A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards.
- A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
- A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- B The blank exhibited a positive result greater than the reporting limit for this compound.
- CN See Case Narrative.
- D Result is based from a dilution.
- E Result exceeds the calibration range for this compound. The result should be considered as estimate.
- F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- H Sample was analyzed outside recommended hold time.
- HT At clients request, sample was analyzed outside recommended hold time.
- J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
- K Diesel result is biased high due to amount of Oil contained in the sample.
- L Diesel result is biased high due to amount of Gasoline contained in the sample.
- M Oil result is biased high due to amount of Diesel contained in the sample.
- N Gasoline result is biased high due to amount of Diesel contained in the sample.
- MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
- MI Result is outside control limits due to matrix interference.
- MSA Value determined by Method of Standard Addition.
- O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
- P Detection levels of Methylene Chloride may be laboratory contamination, due to previous analysis or background levels.
- Q Detection levels elevated due to sample matrix.
- R RPD control limits were exceeded.
- RF Duplicate failed due to result being at or near the method-reporting limit.
- RP Matrix spike values exceed established QC limits, post digestion spike is in control.
- S Recovery is outside control limits.
- SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
- * The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

CHAIN OF CUSTODY RECORD

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	"

Specialty Analytical

	11 Cl Pł	Pecialty A 711 SE Capps Roa ackamas, OR 9701 10ne: 503-607-133 x: 503-607-1336	ad 15				Con Add	ress	1555 1555	1 Or and	1-5 2 0	omh E	97703		
Collected B	v: - 11	A(M)					Pho	ne	<u> </u>				Fax		
Signature 4	• //////						Proj	ect No.	<u>>67</u>	Mu	<u> Data</u> V	Pro	ject Name		
Printed	MITTE	inch					Invo	ice To _	Locatio	on OR		WA	Other P.C	D. No.	
Signature				_	Г				Analys						
								T	Allaivs	ES	ПТ	$\neg \tau$	Lab Job No. 0912	oratory Use	
					S								Shipped Via		
	Normal 5-7 E	Business Days			of Containers	SIS							Air Bill No.		
□ F	Rush	0			ပို	V							Temperature On Reco	eipt	<u>.</u> ℃
Rush Analys	es Must Be	Specify Scheduled With The	Lab In Advance		No. o	200							Specialty Analytical C Specialty Analytical T		
Date	Time		ole I.D.	Matrix	1	17			ł				Comments		Lab I.D.
41409	0943	Sjorm w	yer .			K							Comments	·	Lab 1.D.
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Company:	2005	A	14/10/09 1143	_ 1	-					- 1	npany:	- - ,		Date	Time
Unless Recla Samples held I	i med, Samp beyond 60 da	les Will Be Disposed of ys subject to storage fee	f 60 Days After Receip	ot.						Rec	eived F	or Lab B	Y.	Date 12/	Time
Copies: White-	-Original	Yellow-Project F	File Pin	k-Customer Co	ру			······································			0			415/04	11:45

Page of

PORTLAND BULK TERMINAL 5 DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches	Clear of	Water	nooled	Pond (Clear of	Water	rloval	Water	Around	Dook 6	Surface	Comments	
				Debris, B			culvert	Debris, E		above			ree of		xcessive	Describe any corrections taken	
			Product	İ	g Solids		under C7?		Floating Solids		weir?		Floating Solids		Spillage ?	and the date of completion	
			·	& Oily	Sheen?			& Oily S	Sheen?			& Oily				•	
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)	
16	RW	Prein	NA					/									
17	SM	Cleves	PSTO														
18	MA	Clean	7 Shop				/	/			/			\			
19	MH	Cloudy	NIA								/			/			
20	MH	Cloudy	F1I1								\						
21	KM	Cloudy	76PN	/			/				/	/		/			
22	KM	Cloudy	NA	/			/	/				/		1			
23	KM	Partly O	N/A	/			/	/			/			/			
24	KM	Clear	NIA				/				/	/		2			
25	MH	avily	76PN				/	/			1			/			
26	MH	Mordy	76AN	1				/			1	/		/			
27	MH	Clear	NIA								/			/			
28	KM	Partly	76PN				/				/			/			
29	KM	Clovely	NIA				/	1				1			š.		
30	KM	Partlyd	JOPN	/			/	/			/	/		/			
31		0															

MANAGER SIGNATURE: DATE: 7/7/19

PORTLAND BULK TERMINAL 5 DAILY WATER POLLUTION CONTROL CHECKLIST & LOG

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

	···			Ditches	Clear of	Water	pooled	Pond C	lear of	Water	level	Water	Around	Dock S	Surface	Comments
				Debris, E	llockage,	at the	culvert	Debris, B	llockage,	above	e the	Dock	Free of	Free of E	Excessive	Describe any corrections taken
		:	Product		g Solids	unde	r C7?	Floating		we	ir?	Floating		Product 9	Spillage ?	and the date of completion
Data	lmitimin	M/- ath an	المسطامط	& Oily		VEC	NO	& Oily S		VEO	NO.		Sheen?	VEO	NO	
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	RW	Cloudy	QFSS													
2	KM	Raim	GSIT									/				
3	Bm	alaxly	Alfa					/								
4	MH	Shoons	NA					/								
5	MH	DC loxu										/				
6	mH	Ran	2570	_									ane a	/		
7	ЦM	Clowin	3 Mm									/				
8	BM	Cloar	79								/					
9	KM	Pain	TIM											1		
10	Km	Cloud	41 I/1					Ż								
11	AM	Clarie	Ilm													
12	mH	Octorly	γ													
13	MH	Clean	G575	1												
14	Idm	Cloudy	41-11												,	
15	BM	Ran	CAIA								/	/				

Routing:	Please check box when reviewed		Distribution:
	2. Terminal Manager		Original to File
	3. Assistant		Copy to Stormwater Report File

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditale	01					_		1				
				Ditches		Water		Pond C		Water		Water			Surface	Comments
			Product	Debris, E	- 1		culvert	Debris, E		abov		Dock F			xcessive	Describe any corrections taken
			rioduct	Floating		unde	1677	Floating		we	eir?	Floating		Product 9	Spillage ?	and the date of completion
Date	Initials	Weather	Handled	& Oily:	NO	YES	NO	& Oily S		VEC		& Oily S		VE0	110	
Date	IIIIIais	Weather	rianuleu	TES	NO	TEO	NO	152	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	MH	Clary	Thm	/			/									
17	km	Rain	Allen				/	\			/	\				
18	KM	Rain	5 Mm	/							/				,	
19	ЯM	Cloudy	RSTO								/					
20	RW	Dán	4015	/		_										
21	MH	Pain	WSTO	_				/			/					
22	MH	Cloudy	OTBCU	/			/				/		~		-	
23	mH	Clovin	4215	•/			/									
24	12m	Clary	NA	_			/	/			_/					
25	Bm	Prin	NA	/			_								^	
26	MM	Rain	NA											/		
27	DM.	OCTOXO	NA	/			\									
28	mH	Clary	RESS	/				/								
29	MH	Clark	RESS					/						/		
30	mH	Clari	41T1	/												
31	12m	Rein	Yati	1											gue	

MANAGER SIGNATURE: DATE: 6/1/(

INSTRUCTIONS:

			Product	Ditches Debris, B	llockage,	Water p	culvert	Pond C	llockage,	Water	e the	Water Dock F	Free of	Free of E	Surface	Comments Describe any corrections taken
			Floduct	Floating & Oily 9		unde	1677	Floating & Oily 9		we	eir?	Floating & Oily 9		Product	Spillage ?	and the date of completion
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	MH	pelaxy	NA	/			/	/								
2	m 17	Clane	YaIS								/	/				
3	BM	Dan	Fair						,					/		
4	ВM	Brim	PSTO	_/								/	, m	/		
5	RM	Closely	My								/				,	
6	Km	ocharce	Hrn													
7	MH	lan	Allan				/	1						/		
8	MH	Clean	CISIS				/	/			/			/		
9		Clear.	RSTO								/			/		
10		Dan	LOSTO									/		/		
11	Km	Octorin	NIA							,				/		
12	Km	pcloudy	NA					1		100				/		
13	Hm	Clean	NA	/			/				/			/		
14	mH	Clar	NIA	/								/		/		
15	m H	Clear	NIA				/	/						_		

Routing: Please check box when reviewed	Distribution:
2. Terminal Manager	Original to File
3. Assistant	Copy to Stormwater Report File

INSTRUCTIONS:

	i			Ditches Debris, B		Water at the	pooled	Pond C Debris, E		Water above		l	Around Free of	Dock S	Surface excessive	Comments Describe any corrections taken
			Product	Floating		unde	r C7?	Floating		we	ir?	Floating	g Solids	Product 9	Spillage ?	and the date of completion
.	1 ! ! !	141 41- · ·		& Oily S		7/50		& Oily S				& Oily				
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	AM	Cloudy	Khm													
2	MM	Drin	JOIC	/				/						/		
3	M4	Show	Alla													
4	MH	Closely	NA				/									
5	KM	Clory	COLT1								<u> </u>	/				
6	KM	Closin	GSIS		_											
7	m	Clore	NA							·				/		
8	Km	Dain	NA	/				/					,			
9	W17	Cloudy	CTZOU				/		,							
10	MH	Clean	9726				1									
11	mit	Claring	NA													
12	RM	Shoven	N/A	/		1		/			1					
13	12m	Show	NIA	/		1		/			/	/		/		
14	Km	Ollowhy	Flyn	/			/		· · · ·					/		
15	Him	Olmay	7.9m				1									

Routing.	Please check box when reviewed	Distribution:
🖒	2. Terminal Manager	Original to File
	3. Assistant	Copy to Stormwater Report File

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches	Clear of	Water	pooled	Pond C	lear of	Water	level	Water	Around	Dock S	Surface	Comments
		Ì		Debris, B	lockage,	at the	culvert	Debris, B	lockage,	above	e the	Dock I	ree of	Free of E	Excessive	Describe any corrections taken
			Product	Floating	g Solids	unde	r C7?	Floating	Solids	we	ir?	Floating	Solids	Product	Spillage ?	and the date of completion
				& Oily S				& Oily S				& Oily			Г	
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	MH	O. Clories	LUSTO	/			V									
17	mit	Cloving	NIA	/			/							/		
18	MA	Log	Fat	/	 		/				12	_				
19	KM	Delavey	NA					/			/	/		/		
20	BM	Chary	NIA									· /	···			
21	Km	Clary	Flon				/				1					
22	ILM	pclary	N/A	/				. /				_	/	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
23	mH	Clorie	Allm				/				/		-			
24	MH	Cloudy	6575								/	/				
25	HM	Cloudy	N/A	/								/				
26	12m	Maly	42IS	/				/			<i></i>	/		/		
27	MM	Prin	4215	/		/	÷	/				/				
28	\$M	Cloudy	LOSTO	/		/										,
29	2m	Ban	LOSTO	1												
30	MA	Clarry	7.36													
31																

MANAGER SIGNATURE:

DATE: 5/3/10

INSTRUCTIONS:

				Ditches	Clear of	Water	pooled	Pond C	Clear of	Water	level	Water	Around	Dock S	Surface	Comments
				Debris, B			culvert	Debris, E		above			ree of	l	xcessive	Describe any corrections taken
			Product	Floating	Solids	unde	r C7?	Floating	Solids	we	ir?	Floating	g Solids	Product 9	Spillage ?	and the date of completion
					Sheen?		ľ <u>.</u>	& Oily				& Oily				
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	RW	Clary	WESS								/					
2	KD	(Dayy	NA	/			/									
3	RM	OCIONER	16/0-								/					
4	Hm	Miorxi	NIA				/	/			/			/		
5	mH	OG POOCH	NA				/				1			/		,
6	mH	Clear	NIA				/				/	\	A**			·
7	mH	Clean	NIA					/			1			/		
8	Km	Clour	Nola				/		-		/					
9	Km	Modu	· ·						p. 6**		/					
10	Mm	Clayin	NIA									/	a.			
11	MM	()	LOSTO				/				/					
12	mH	Bain	NA								/			/		
13	m H	Shnay	4111					\			/			1		
14	mH	Oloan	4171											/		
15	DM	00 more	RSTO	_/			/	/								
	Routing:	7	box when reviewed	1			Dietrik	oution:				1				
		2. Terminal M					Original									
		3. Assistant		J			Copy to	Stormwa	ter Repo	rt File]				

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches	Clear of	Water	pooled	Pond C	lear of	Water	level	Water	Around	Dock S	Surface	Comments
				Debris, B	lockage,	at the	culvert	Debris, B	lockage,	abov	e the	Dock f	ree of	Free of E	Excessive	Describe any corrections taken
			Product	Floating		unde	r C7?	Floating		we	ir?		g Solids	Product 8	Spillage ?	and the date of completion
Data	Initials	Moothor	Handled	& Oily S	Sheen? NO	YES	NO	& Oily S	Sheen? NO	YES	NO	& Oily S	Sheen?	YES	NO	
Date	miliais	Weather	_	TES	NO	YES	NO	TES	NO	165	NU	YES	NO	TES	NO	(Attach separate sheet if required)
16	BM	peloude	GILIL													
17	Цm	Clary	NIA				. /					/		/		
18	MM	Monin	Q1 <u>I</u> 1	/												
19	MH	Class	65I5				/				/					
20	MH	Minely	42I5					_/			/					
21	MH	Shaces	RSTO				/	/						/		
22	15m	Porcin	OSTO	/				/						/		
23	1dm	Leg	Floor						,							
24	Km	Monocly	4Sm				/		/		/	/				
25	19m	Pain	LOSTO				/									
26	mH	Shows	Tho				/						,·			
27	m 14	Cloar	TH'm											/		
28		Pain	NA				/									
29	12m	Dain	NA													
30	MM	Pain	Alm	/				/						/		
31	Km	Clardy	LOGIO	//				<i>i</i> /				/				

MANAGER SIGNATURE:

INSTRUCTIONS:

		<u> </u>	T		l .										
			Ditches		Water	pooled	Pond C	lear of	Water	level		Around	Dock S	Surface	Comments
			Debris, E		at the	cuivert	Debris, E	_	abov	e the	Dock I	Free of	Free of E	Excessive	Describe any corrections taken
	- [Product		g Solids	unde	r C7?	Floating	Solids	we	ir?	Floating	g Solids	Product	Spillage ?	and the date of completion
			& Oily				& Oily S				& Oily				
Date Initia	als Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1 200	Dain	WESS	/			/									
2 ×	n Clorcy	PSTO	/			/				/					
3 K)	ndin	Allm											_		
4 10 }	3 Clarky	Ihn)		J. 4.			
5 M	H Shaars	LOSTO			!	/	/			/	/:				
6 M	+ Cloudy	4275						er .				mer mer	/		
7 M	+ Clordy	NA				\	- /								
8 Xn	n Haid	Ihn	_/												
9 Kn	n Joa	LOSTA								/			,		
10 Br	n De Jorge	1015				/	/			/			/		
	n Clordy	PSTO	سسنه								\				
12 M)	, / 500	RSTO													
13 \\ \\	,	74m				\				/			1		
14 M		Flo													
15 Kr	n Claida	1													
Davis			1			Dictall	utlos				1				
	⊸ " I														
1 =	3. Assistant	iai lagei				-	Stormwa	ter Repo	rt File					,	
14 M 1 15 Kn	+ Shaans + Shaans Clarky ng: Please check	ALM PSTO box when reviewed				Distrib Original				/			/		

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches	Clear of	Water	pooled	Pond C	lear of	Water	r level	Water	Around	Dock S	Surface	Comments
			<u> </u>	Debris, B	lockage,	at the	culvert	Debris, B	llockage,	above	e the	Dock I	ree of	Free of E	xcessive	Describe any corrections taken
			Product	Floating	3 Solids	unde	r C7?	Floating	Solids	we	eir?	Floating	g Solids	Product 9	Spillage ?	and the date of completion
				& Oily S	Sheen?			& Oily S	Sheen?			& Oily	Sheen?			
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	RW.	Clary	G1 I4	/							/	/		/_		
17	12m	Choichy	Alm													
18	'dm	Octourly O	DIA	/				/								
19	MH	Claar	Ihn						. \						<u>.</u>	
20	mH	Clon	10/A	/			/	/								
21	mH	Clar 1							,,				,		***********	
22	Bm	Mary	29hn				/		er.							
23	MM	Clary	LOSTO	/							/					<u> </u>
24	AM	Dain	2510	,			/						***			
25	KM	Clarly	41I1													
26	MH	Show	losto													
27	MH	Diggery	WESS													
28	4m	Cloudy						/								
29												/				
30																
31			\alpha Ar			<u></u>										

KMB00010082

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches	Clear of	Water	pooled	Pond C	lear of	Water	level	Water	Around	Dock S	Surface	Comments
				Debris, B	lockage,		culvert	Debris, E	llockage,	abov	e the	Dock F	ree of	Free of E	xcessive	Describe any corrections taken
1 1			Product	Floating	Solids	unde	r C7?	Floating	Solids	we	ir?	Floating	Solids	Product 9	Spillage ?	and the date of completion
				& Oily S				& Oily S		···		& Oily S				
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	MH	Shows	4111	<u>/</u>				/		·	/					
17	MH	Shabus	RESS					/								
18	KW	Shass	RESS				/	/								
19	4m	Clarky	5 your		-		/				_		· · · · · · · · · · · · · · · · · · ·			
20	RW	Clorry	John										<i>.</i> *			
21	Sm	Shoars	7950													
22	m H	e loody	Allen								/		~			
23	MH	Clorin	NA										<i></i>			
24	M/+	Clorly	4215													
25	Цm	Oloxin	7/1/2	/												
26	Цm	you,	NIA													
27	dm	Clarky	FIM									1				
28	KM	Clarie	NIA	/							/					
29	MI	Cloudy	NÍA	/							/					
30	mH	Cloudy	John													
31	mbt	Clocky	Thin	V	Λ		/	/			1					

MANAGER SIGNATURE

INSTRUCTIONS:

			Complete triis	Ditches		Water			Clear of	Water		· · · · · · · · · · · · · · · · · · ·	Around		Surface	Comments
				Debris, B			culvert		Blockage,	abov		Dock f			xcessive	Describe any corrections taken
		:	Product		g Solids	unde	r C7?	Floating			eir?		Solids	i	Spillage ?	and the date of completion
				& Oily S	Sheen?	<u> </u>		& Oily S	Sheen?			& Oily S	Sheen?			
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	MH	Show	NA	/			/									
2	mlt	Clovely	NA								/	/				
3	m 17	Shours	NA													
4	BM	Pain	RSTO	.							1					
5	Km	Rain	WSTO							-	1					
6	KM	Clarky	MA													
7	hm	Model	Jihn								/					
8	12M	Clarky	NA													the state of the s
9	MH	Clary	NIA													
10	MIT	Clours	NIA								/			<i>)</i>		<u> </u>
11	idm	Shawis	NIA			-		/								
12	MM	Clowly	J.hn													
13	KM	Pain	7th				,,,,,,,									
14	M	Clary	6515													
15	WA	Ollowli	TIII						and the second						Let .	
	· —	Please check l 2. Terminal M	box when reviewed anager				Distrib Original	oution: to File								

	<u> </u>	
Routing:	Please check box when reviewed	Distribution:
	2. Terminal Manager	Original to File
	3. Assistant	Copy to Stormwater Report File

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches	Clear of	Water	pooled	Pond C	lear of	Water	rlevel	Water	Around	Dock 9	Surface	Comments
				Debris, B	-	at the	culvert	Debris, B	llockage,	abov	e the	Dock I	ree of	Free of E	xcessive	Describe any corrections taken
		l İ	Product	ŀ	g Solids	unde	r C7?	Floating		we	eir?	Floating		Product 5	Spillage ?	and the date of completion
Date	Initials	Weather	Handled	& Oily	Sheen?	YES	NO	& Oily S	Sheen? NO	YES	NO	& Oily :	Sheen?	YES	NO	
Date		<u> </u>		163	NO	163	NO	TEO	INO	169	NO	TES	NO	YES	NO	(Attach separate sheet if required)
16	MM	bain	WOSTD	/			/		!							
17	Bm	Corly	Thom													
18	MH	Claring	4215				/				/			/		
19	MH	Shower	4aIC						er.							
20	mH	Shown	Tho				/	/						/		
21	12m	Dam	WESS	/							\					
22	bm	Clory	RSTO_											/		
23	BM	Joca	NIA													
24	40	99	4111										J	1	!	
25	Km	75 C	NIA											/		
26	HM	Clear	4171			/	/				/	/		/		
27	MH	Clarky	G5I5	/			/									
28	12 m	Cloixly	WSTO					/					-	/	-	
29	Km	OCLOSEL	Flin													
30	Sm	SUDW	Tym					-			/					
31	ym	Drein	MA						, were a			/				

MANAGER SIGNATURE: 1414

INSTRUCTIONS:

			Complete tille													
1				Ditches	Clear of	Water	pooled	Pond C	Clear of	Water	level	Water	Around	Dock S	Surface	Comments
]				Debris, B	llockage,	at the	culvert	Debris, E	llockage,	abov	e the	Dock !	Free of	Free of E	Excessive	Describe any corrections taken
1			Product	Floating	g Solids	unde	r C7?	Floating	g Solids	we	ir?	Floating	g Solids	Product 9	Spillage ?	and the date of completion
[& Oily				& Oily 9				& Oily				
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	12m	Clarly	Floor	/.			/.				/	3				
2	9M	Clean	RSTO					/			/					
3		Cloon	PSTO				/	/								
4	MH.	Clony	PESS	./	_		/	/		ı				,/		
5	WH	deg	NIA										····			
6	MH	Morry	NA													·
7	Hm	Clarry	NIA						-							
8	KM	Clear	NA						··	.!						
9	Hm	Clean	NIA													
10	am	Clean	DIA													
11	mH	Caas	G1I1		- -		/	/						/		
12	WH	Clarky	(b1T1					/					 			
13	MIT	Clarky	4DIS				/				,			/		
14	RW	Cloudy			i		/									
15	KM	Rain	GSI5						/							
	Routing	Places shook l	box when reviewed	1			Distrib	ution:				1				

Routing:	Please check box when reviewed	[Distribution:
	2. Terminal Manager		Original to File
	3. Assistant		Copy to Stormwater Report File

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

												10 05				
				Ditches		Water			Clear of	Water		Water		Dock S		Comments
			Donatoral	Debris, B		at the		Debris, E		above	e the	Dock F			xcessive	Describe any corrections taken
			Product	Floating		undei	· C7?	Floating		we	eir?	Floating		Product 5	Spillage?	and the date of completion
	1 - 141 - 1 -	14 4 - 11		& Oily S				& Oily S			· · · · · · · · · · · · · · · · · · ·	& Oily S				
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	RW.	Dan	DA													plus in collect
17	4m	Prain	NA													. 0
18	bm	Closey.	WSTO				/									
19	KM	Brin	65IS					/								
20	MH	Shaas	NA				/	/								
21	mH	Shame	ALE													
22	mH	Dain	RSID					/								
23	MM	Cloury	10570	/			/							_/		
24	dm	Cloudy	NO/A	/									/		,	
25	idm	Log	NIA	/				_						/	or ^{es}	
26	DW	Dan	NA													
27	mH	Shaad	ISTO	/		/				·						
28	MH	clordy	NA	./												
29	MH	Clarry	D/A				/									
30	Km	Chry	GY II	./									-			
31				\Box												

MANAGER SIGNATURE

INSTRUCTIONS:

			Complete triis	 	Clear of	Water at the	pooled	Pond C	Clear of	Water	level	Water	Around	Dock S	Surface	Comments
			Product		g Solids		r C7?	Floating		we			ree of Solids		xcessive Spillage ?	Describe any corrections taken and the date of completion
			} 	& Oily	Sheen?			& Oily S					Sheen?		,	
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	8m	Yeg	LOSTO	_/												
2	Bm'	Log	10510				/									
3	RW	40g	B1I4				/									
4	DM	Ochury	NA													
5	ym.	Clarcy	NIA										i			
6	RW.	Clary	LOSTO													
7	MH	Cloudy	LOSTP	-												i
8	WH	Shaws	NA	parameter .								/				
9	MM	Clourly	NIA				/									
10	KM	Cloud	NA	/			/							/		
11	Km	Rain	Ahn				-/									
12	MM	Clourly	NA								/					<u> </u>
13	mH	Bain	NA													
14	MH	Pain	NA	/		/									gar.	Pluz in Cal vert
15	mH	Snow	NIA												-	Que un Colvert
	Routing: Please check box when reviewed 2. Terminal Manager 3. Assistant Distribution: Original to File Copy to Stormwater Report File															J

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches	Clear of	Water	pooled	Pond C	lear of	Water	level	Water	Around	Dock S	Surface	Comments
				Debris, B	lockage,	at the	culvert	Debris, B	lockage,	abov	e the	Dock !	Free of	Free of E	xcessive	Describe any corrections taken
		İ	Product	Floating		unde	r C7?	Floating	Solids	we	ir?	Floating	g Solids	Product	Spillage ?	and the date of completion
D-1-	11411	187 11		& Oily S				& Oily S				& Oily				
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	mH	(box	NA		·											
17	MH	Clarly	NA	/					,e							
18	KM	Showy	4215									_				
19	mH	Clary	NA						,er							
20	RM	Cloud	PSTD								<i></i>					
21	Km	Pain	4215													
22	dM	You	4015					/								
23	MH	Pain	NA				/					/				Datage act
24	cm	Phyla	NA	/								/				3
25	MH	469	RSTO	مسره				/								
26	Km	Ran	PSTO		and the second s					<i>/</i>						Heavy Keen During theday
27	RM	Shows	PSTP			·					-/					. 3 /
28	AM	Close										/		1		
29	MH	Shows	Flor	/									/			
30	KM	Clarly	10870	/							/			/		
31	MH	Show	Ala		11											

MANAGER SIGNATURE: DATE: 1 P.C.

INSTRUCTIONS:

				Ditches	Clear of	Water	pooled	Pond C	Clear of	Water	level	Water	Around	Dock S	Surface	Comments
				Debris, B	lockage,	at the	culvert	Debris, E	llockage,	abov	e the	Dock i	ree of	Free of E	Excessive	Describe any corrections taken
•			Product	Floating		unde	r C7?	Floating		we	ir?	Floating		Product 8	Spillage ?	and the date of completion
Date	Initials	Weather	Handled	& Oily S	Sheen?	YES	NO	& Oily S	Sheen?	YES	NO	& Oily S	Sheen?	YES	NO	(4)
Date	minais	Λ)	. 6	123	NO	163	NO	ILO	INO	TE3	NO	TES	NO	150	NO	(Attach separate sheet if required)
1	9W	Closely	4015				/		<u>.</u>							
2	KM	Clocky	CoLI1		, · ·											
3	cm	Cloud	4174													
4	mH	Shows	NA													
5	Km	You	Alm	\												
6	Hm	400	7. Fr	\									l.ee.			
7	ym	DCIPULY D	, i								/					
8	Km !	Jer	WSTO									/				
9	MH	llean	NIA								/		, e			
10	MH	Octorru	RFSS				/		**				<i>-</i>			
11	mIt	OCtours	4215													
12	KM	OCTOUTU	N/A						,				~*			
13	Km	Clovin	N/A	/												
14	Km	Bain	NA		/											
15	KM	Cloude	NA				/									
!	Routing:		box when reviewed				Original	oution: to File Stormwa	ter Repo	rt File						

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches	Clear of	Water	pooled	Pond C	lear of	Water	level	Water	Around	Dock S	Surface	Comments
1 1				Debris, B	lockage,	at the	culvert	Debris, B	lockage,	abovi	e the	Dock I	Free of	Free of E	Excessive	Describe any corrections taken
]]			Product	Floating	g Solids	unde	r C7?	Floating	Solids	we	ir?	Floating	g Solids	Product	Spillage ?	and the date of completion
D-4-	1-:4:-1-	\\\4	l (i - dt- a	& Oily S	_	\((= 0		& Oily S				& Oily				
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	BM	OCKOOLY	NA	_/												
17	KM	Clory	N/A													
18	mH	OCTOVERS	N/A						and t		\					
19	MH	Spar	NA								/	\				
20	mH	Clear	N/A	/			/						.**			
21	Km	Clean	N/A									/		/		
22	KM	Can	NIA	_/		,										
23	KM	Clear	NA			,							r'			·
24	KM	OCIOINU	NIA													
25	MH	Cloudy	RSTO													
26	CM	Clean	NIA										/			
27	MIT	Oleva	NIA													
28	MM	0000	NIA											/		
29	RM	Chary	NP									/				
30	KM	Clourly	MA					1			/					
31/								\wedge								

KMB00010091

INSTRUCTIONS:

	1			D., .	01 1	<u>,,, ,</u>				T						
				Ditches Debris, B		1	pooled culvert	1	Clear of		r level		Around		Surface	Comments
			Product	Floating				Debris, E		abov			Free of		xcessive	Describe any corrections taken
1			1 Todact	& Oily S		unge	er C7?	Floating & Oily S		we	eir?	& Oily	g Solids	Product	Spillage ?	and the date of completion
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	1110	Cloxu	NA									/		/	1,0	(Attach Separate Sheet in required)
	17 X	. (1	\bigcirc \bigcirc \bigcirc													
2_	D11)	Morly	+ Dum			 -										
3	am	Cloudy	Form													
4	MH	Cloudy	N/A								/		/			
5	MH	Pain	COSTS	/		_		/			/					
6	m H	Shown	4111				/	/			1					
7	иm	Clovry	N/A						_		,	/		/		
8	MH	Jorg O	WSTO	-			/	/						/		
9	Cm	Clouds	7/200						-						,	
10	BM	Delow	Alm								1					
11	KM	Clins	ALLIN	_/	,		/	/				\		/		
12	Em	(1000)	NIA	/							/					
13	MH	O louin	NIA					/								
14	MH	Minau	75hn	/			/									
15	mH	Ollary		/				/				/		/		
	Routing:	(box when reviewed				Original	oution: to File Stormwa	ter Repo	rt File						

, bridge box mich fortone	Diotribution:
minal Manager	Original to File
sistant	Copy to Stormwater Report File

INSTRUCTIONS:

				Ditches	Clear of	Water	pooled	Pond (Clear of	Water	r level	Water	Around	Dock 9	Surface	Comments
				Debris, B	llockage,	at the	culvert	Debris, E	llockage,	abov	e the	Dock	ree of	Free of E	Excessive	Describe any corrections taken
			Product		g Solids	unde	r C7?	Floating		we	eir?	Floating		Product 9	Spillage?	and the date of completion
D-44	lmiki a la	\A(= = \b =	1.1111	& Oily		7/20	- NG	& Oily S		\		& Oily				
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	MH	Cloring	75m				_				/			./		
2	mH	Can	John	/			/				/					
3	4m	Coen	4215	/												
4	Mm	Clouds	Yais									/				
5	SM	OCIONU	4215				/				/					
6	KM	Maxie	NA													
7	KM	Cloud	4075				_									
8	KM	Cloudy	NA	/			/				/	/				_
9	KM	Cloudy	NIA				/				/					
10	KM	Clear	NIA	/			/			·	/	/		/		
11	ivM	Partly. Cloudy	FV15				/	/			-/	/				
12	KM	Point	F215	1			/				/	/				
13	KM	Partly Cloudy	F2I5	/			/	/			/					
14	MH	Cloudy	F2I5	/			/	/			/			/		
15	MH	Cloudy	NA	/			/	/			/	/				

Routing:	Please check box when reviewed		Distribution:
	2. Terminal Manager		Original to File
	3. Assistant		Copy to Stormwater Report File

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches	Clear of	Water	pooled	Pond C	lear of	Water	level	Water	Around	Dock S	Surface	Comments
				Debris, B			culvert	Debris, E		abov		Dock i			xcessive	Describe any corrections taken
			Product	Floating	g Solids	unde	r C7?	Floating	g Solids	we	ir?	Floating	g Solids	Product 9	Spillage ?	and the date of completion
İ,				& Oily S				& Oily S				& Oily				
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	MH	Partly	NIA	/												
17	KM	Clear	F215					/			/	/				
18	KM	Clear	FILS	/	!		1	/		 	/					
19	KM	Clear	F2I5	_							/					
20	KM	Clear	FUI5				/	/			/					
21	MH	Cloudy	NIA	/			/	/			/	/		/		
22	MH	Cloring	NIA													
23	MH	Clear	NA													
24	BM.	Clourly	G1T1						.a.*							
25	ym.	Pan	GSIS											/		
26	2m	Clear	NIA	/												
27	BM	Coear	Alm													
28	MH	Olowy	0/0					/								
29	mit	Clary	WSTD	/				/	, e e				l'			
30	mM	Clasely	2870				/		-					_		
31	Kan	Clare	CORD		1									1		

MANAGER SIGNATURE: / MK Com DATE: 1 SEP 2009

INSTRUCTIONS:

				5:: 1	O .									<u> </u>		
j	1			Ditches		Water		Pond C		Water		1	Around		Surface	Comments
1			Product	Debris, B Floating		at the		Debris, B		abov		1	Free of		xcessive	Describe any corrections taken
			rioddol	& Oily		unde	1071	Floating & Oily 9	1	we	ir?	& Oily	g Solids	Product	Spillage ?	and the date of completion
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
						1 4.50	.,,,	0	-110	120	110	120	, 110	120	- 110	(Attach separate sheet in required)
1	pm	Clean	NA													
2	Idm	Clean	NIA													
3	HM	Clean	N/A													·
4	i		NIA													
5	m H	Clear	NIA													
6	Km	Clarky	NIA	/												
7	Km	Clorin	ALCA													
8	Km	Clark	NIA													
9	12m	,	Ola													
10	mH	Moriu	NIA													
11		Cloar	WA			!										
12	mIt	Cloriu	NIA													
13	'	Clary										/				
14	KM	Clary	ł													
15	KM	Clear	47.17	/				/		_	/					HStarted New LENM
		1		1			5					7				U

Routing:	Please check box when reviewed	Distribution:
	2. Terminal Manager	Original to File
	3. Assistant	Copy to Stormwater Report File

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches	Clear of	Water	pooled	Pond C	lear of	Water	level	Water	Around	Dock S	Surface	Comments
Ì				Debris, B		at the		Debris, B		above	e the		Free of		xcessive	Describe any corrections taken
			Product	Floating	3 Solids	unde	r C7?	Floating	Solids	we	ir?	Floating	Solids	Product 5	Spillage ?	and the date of completion
				& Oily S				& Oily S				& Oily				
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	YES	, NO	(Attach separate sheet if required)
16	ym,	Clean	alle													
17		Clean	NA	/				/								
18		Clear	NA	/			/				/					······
19	m17	Coas	NA	/				/			/	/		/		
20	Km	Clear	NA	/				/								
21	BM	(Quar	Allon												-	
22	13m	Clans	NA	/				/						/		
23		Clony	NA					/								
24	MH	Clour	1				/				/			/		
25	MH	Clean	N/A	/								/				
26	MIT	Clan	NA									/	, **			
27	MH	Clean	4215						<i>2</i> *		/			_/		
28	KM	Clean	4aIS													
29	KM	Clear	40I5													
30	Km	Clean	1215						r							
31	mH	Clary	LEDSTO	ر ر									_			

MANAGER SIGNATURE: DATE: 7/3/49

Explanation of the Preliminary Monthly Climate Data (F6) Product

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KPQR 011230 CF6PDX PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: PORTLAND OR

MONTH: JULY
YEAR: 2009
LATITUDE: 45 35 N
LONGITUDE: 122 36 W

,	TEMPERATURE IN F:						: PCPN :	5	: WONE	WIN	ID.		: SUNS	SHINE	: SK	Z.	:PK V	ND
==: 1	====: 2	==== 3	==== 4	==== 5	==== 6A	==== 6B	 7	====: 8	===== 9	==== 10	11	====: 12	===== 13	 14	==== 15	16	===== 17	18
_	_	J	-			-	·	•	12Z			2MIN						
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH				MIN	PSBL	S-S	WX	SPD	DR
==:	====	====	====		====:	====	=====	====		====	===	====	====		====	====	=====	====
1	87	55	71	5	0	_	0.00	0.0	0			320	М	M	0			320
2	96	58	77	11	0		0.00	0.0	0			320	M	M	1			320
3	92	59	76	10	0		0.00	0.0	0			330	М	M	1	_		330
4	92	59	76	9	0		0.00	0.0	0			290	M	M	3	_		280
5	86	59	73	6	0	_	0.00	0.0	0			260	M	М	_	8		270
6	70	58	64	-3	1	_	0.00	0.0	0			220	M	M	8			180
7	73	58	66	-1	0	-	0.00	0.0	0			320	М	M	8			310
8	68	56	62	-5	3	0	Т	0.0	0			200	M	M	9			170
9	76	56	66	-1	0		0.00	0.0	0			310	M	M	5	_	43	90
10	89	58	74	6	0	_	0.00	0.0	0			180	M	M	6	3		190
11	79	60	70	2	0	_	0.00	0.0	0			310	М	M	5			150
12	65	58	62	-6	3		0.33	0.0	0			210	М	М		18		200
13	71	58	65	- 3	0	_	0.01	0.0	0			220	М	М	9			190
14	80	58	69	1	0		0.00	0.0	0			320	М	M	5			320
15	89	58	74	6	0		0.00	0.0	0			310	M	M	2			330
16	93	62	78	10	0		0.00	0.0	0			300	M	M	2			320
17	95	64	80	11	0		0.00	0.0	0			320	M	M	4			310
18	86	61	74	5	0		0.00	0.0	0			330	M	M	4			320
19	83	56	70	1	0		0.00	0.0	0			320	M	M	1			320
20	92	60	76	7	0		0.00	0.0	0			320	M	M	3			320
21	90	64	77	8	0		0.00	0.0	0			350	M	M	0			310
22	82	58	70	1	0		0.00	0.0	0			320	M	M	2			320
23	76	60	68	-1	0	-	0.00	0.0	0			320	M	M	7		23	30
24	85	59	72	3	0		0.00	0.0	0			310	M	M	4			300
25	90	63	77	8	0		0.00	0.0	0			310	M	M	3			310
26	93	61	77	8	0		0.00	0.0	0			310	M	M	2			310
27		68	86	17	0		0.00	0.0	0			290	M	M	1			350
28	106	74	90	21	0		0.00	0.0	0			330	M	M	1			340
29	106	71	89	20	0		0.00	0.0	0	-	. 15	90	M	М	1			100
30	96	67	82	13	0	17	0.00	0.0	0	5.0	12	320	М	М	1		15	330

```
31 ·94 62 78 9 0 13 0.00 0.0 0 5.8 15 320 M M 4 18 320
______
SM 2683 1878 7 281 0.34 0.0 186.1 M 118
______
                                    6.0 FASTST M M 4 MAX(MPH)
AV 86.5 60.6
                           MISC ---> # 21 320
                                                    # 43 90
______
# LAST OF SEVERAL OCCURRENCES
COLUMN 17 PEAK WIND IN M.P.H.
PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2
                                    STATION: PORTLAND OR
                                           JULY
                                    MONTH:
                                            2009
                                    YEAR:
                                    LATITUDE: 45 35 N
                                    LONGITUDE: 122 36 W
[TEMPERATURE DATA] [PRECIPITATION DATA]
                                          SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 73.6 TOTAL FOR MONTH: 0.34 1 = FOG OR MIST

DPTR FM NORMAL: 5.5 DPTR FM NORMAL: -0.38 2 = FOG REDUCING VISIBILITY
HIGHEST: 106 ON 29,28 GRTST 24HR 0.34 ON 12-13
                                              TO 1/4 MILE OR LESS
LOWEST: 55 ON 1
                                          3 = THUNDER
                     SNOW, ICE PELLETS, HAIL 4 = ICE PELLETS TOTAL MONTH: 0.0 INCH 5 = HAIL
                                 0.0
                     GRTST 24HR
                                            6 = FREEZING RAIN OR DRIZZLE
                                           7 = DUSTSTORM OR SANDSTORM:
                     GRTST DEPTH: 0
                                               VSBY 1/2 MILE OR LESS
                                           8 = SMOKE OR HAZE
                    [WEATHER - DAYS WITH]
                                           9 = BLOWING SNOW
[NO. OF DAYS WITH]
                                           X = TORNADO
MAX 32 OR BELOW: 0 0.01 INCH OR MORE:
MAX 90 OR ABOVE: 14 0.10 INCH OR MORE: 1
MIN 32 OR BELOW: 0 0.50 INCH OR MORE: 0
MIN 0 OR BELOW: 0 1.00 INCH OR MORE:
[HDD (BASE 65) ]
               7 CLEAR (SCALE 0-3) 14
TOTAL THIS MO.
              -14 PTCLDY (SCALE 4-7) 13
7 CLOUDY (SCALE 8-10) 4
DPTR FM NORMAL
TOTAL FM JUL 1
DPTR FM NORMAL -14
[CDD (BASE 65) ]
TOTAL THIS MO. 281
DPTR FM NORMAL 148 [PRESSURE DATA]
TOTAL FM JAN 1 371 HIGHEST SLP 30.25 ON 13
DPTR FM NORMAL 180 LOWEST SLP 29.67 ON 29
```

[REMARKS] #FINAL-07-09#

Explanation of the Preliminary Monthly Climate Data (F6) Product

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KPQR 011230 CF6PDX PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: PORTLAND OR MONTH: AUGUST

YEAR: 2009 LATITUDE: 45 35 N LONGITUDE: 122 36 W

•	TEMPERATURE IN F:			PCPN:		: WOM	WIN				SHINE			:PK V				
1	2	3	4	====: 5	==== 6A	===== 6B	===== 7	===== 8	===== 9	===== 10	11	12	==== 13	14	15	 16	===== 17	18
	MAX						WTR			SPD	SPD			PSBL			SPD	
==:	====	====	====	====:	====	====	=====		====:	=====				====:				
1	95	63	79	-10	0	14	0.00	0.0	0	6.1	. 16	320	М	М	5		20	320
2	94	65	80	11	0	15	0.00	0.0	0	5.5	10	310	M	M	7		15	330
3	91	60	76	7	0	11	0.00	0.0	0	6.0	16	320	M	M	2	8	23	230
4	85	59	72	3	0	7	0.00	0.0	0	4.5	10	330	M	M	1		М	M
5	78	58	68	-1	0	3	0.00	0.0	0	5.8	3 13	320	M	M	5		18	330
6	68	60	64	-5	1	0	0.00	0.0	0			160	M	M	10			150
7	69	62	66	-3	0	1	0.00	0.0	0	3.2	2 10	350	M	M	10			330
8	74	61	68	-1	0	_	0.00	0.0	0			280	M	M	10		M	99
9	80	62	71	2	0	_	0.00	0.0	0			320	M	M	7			320
10	85	55	70	1	0	_	0.00	0.0	0			280	M	M	5	_	18	280
11	75	64	70	1	0		0.39	0.0	0			320	M	M	9	1		320
12	79	61	70	1	0		0.30	0.0	0			320	M	M	9	1	23	320
13	70	55	63	-6	2	0	T	0.0	0			320	M	M	7		M 10	M 10
14	68	56	62	-7	3	0		0.0	0			310	M	M M	8 9		18	320
15 16	67 78	57 57	62 68	-7 -1	3	_	0.00	0.0	0			330 310	M M	M M	5			320
17	90	5 <i>7</i>	75	-1	0	_	0.00	0.0	0			320	M	M	5			330
18	92	62	77	8	0		0.00	0.0	0			320	M	M	2			320
19	97	63	80	11	0		0.00	0.0	0	3.2		300	М	М	4			310
20	86	62	74	6	0	9		0.0	0		_	330	М	M	2			320
21	75	63	69	1	0	4	T	0.0	0	4.9	15	310	М	М	7		21	330
22	79	60	70	2	0	5	0.00	0.0	0	9.5	22	310	М	M	5		24	310
23	74	53	64	-4	1	0	0.00	0.0	0	6.9	15	290	M	M	3		22	320
24	81	54	68	0	0	3	0.00	0.0	0	3.0	10	320	M	M	2		13	320
25	72	55	64	-4	1	0	0.05	0.0	0	3.5	12	170	M	M	6	1	13	300
26	85	52	69	1	0	4	0.00	0.0	0	2.3	8	280	M	M	3		12	270
27	92	56	74	6	0	9	0.00	0.0	0	4.1	. 12	310	M	M	2		M	M
28	80	58	69	2	0	4	0.01	0.0	0	3.4	18	280	М	M	6		32	90
29	76	63	70	3	0	5	0.00	0.0	0	5.1	. 16	320	M	M	7		22	90
30	82	62	72	5	0	7	0.00	0.0	0	4.7	15	320	M	M	5		24	20

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31 80 60 70 3 0 5 0.00 0.0 0 6.3 14 350 M M 5 18 350
SM 2497 1837 11 170 0.76 0.0 158.3 M 173
______
                                   5.1 FASTST M M 6 MAX(MPH)
AV 80.5 59.3
                                                    # 32 90
                            MISC ----> # 22 310
______
NOTES ·
# LAST OF SEVERAL OCCURRENCES
COLUMN 17 PEAK WIND IN M.P.H.
PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2
                                     STATION: PORTLAND OR
                                            AUGUST
                                     MONTH:
                                            2009
                                     YEAR:
                                     LATITUDE: 45 35 N
                                     LONGITUDE: 122 36 W
[TEMPERATURE DATA] [PRECIPITATION DATA] SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 69.9 TOTAL FOR MONTH: 0.76 1 = FOG OR MIST DPTR FM NORMAL: 1.4 DPTR FM NORMAL: -0.17 2 = FOG REDUCING VISIBILITY
                     GRTST 24HR 0.39 ON 11-11
HIGHEST: 97 ON 19
                                               TO 1/4 MILE OR LESS
                                           3 = THUNDER
LOWEST:
         52 ON 26
                     SNOW, ICE PELLETS, HAIL 4 = ICE PELLETS
                     TOTAL MONTH: 0.0 INCH 5 = HAIL
                     GRTST 24HR
                                  0.0
                                            6 = FREEZING RAIN OR DRIZZLE
                     GRTST DEPTH:
                                             7 = DUSTSTORM OR SANDSTORM:
                                  0
                                                VSBY 1/2 MILE OR LESS
                                            8 = SMOKE OR HAZE
                    [WEATHER - DAYS WITH]
                                           9 = BLOWING SNOW
[NO. OF DAYS WITH]
                                            X = TORNADO
MAX 32 OR BELOW: 0 0.01 INCH OR MORE: 5
MAX 90 OR ABOVE: 7 0.10 INCH OR MORE: 2
MIN 32 OR BELOW: 0 0.50 INCH OR MORE: 0
MIN 0 OR BELOW: 0 1.00 INCH OR MORE: 0
[HDD (BASE 65) ]
TOTAL THIS MO. 11 CLEAR (SCALE 0-3) 7
              -10 PTCLDY (SCALE 4-7) 18
DPTR FM NORMAL
TOTAL FM JUL 1
              18 CLOUDY (SCALE 8-10) 6
DPTR FM NORMAL -24
[CDD (BASE 65) ]
TOTAL THIS MO. 170
DPTR FM NORMAL 25 [PRESSURE DATA]
TOTAL FM JAN 1 541 HIGHEST SLP 30.24 ON 15
DPTR FM NORMAL 205 LOWEST SLP 29.70 ON 19
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[REMARKS] #FINAL-08-09#

Explanation of the Preliminary Monthly Climate Data (F6) Product

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KPQR 011230 CF6PDX PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: PORTLAND OR MONTH: SEPTEMBER
YEAR: 2009
LATITUDE: 45 35 N
LONGITUDE: 122 36 W

7	rempi	ERAT	JRE :	IN F	:	:	PCPN:	5	: WOM	WIN	1D		: SUN	SHINE	: SK	ľ	:PK V	MND
==:	====	====:	====			====					===		====					====
1	2	3	4	5	6A	6B	7	8	9	10	11	12	13	14	15	16	17	18
									12Z	AVG								
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	DPTH	SPD	SPD	DIR	MIN	PSBL	s-s	WX	SPD	DR
==:	====	====	====	===:	====:	====	=====	======		====	===	====:	====		====	===	=====	====
1	76	58	67	0	0		0.00	0.0	0			310	М	M	5	_		330
2	85	56	71	4	0	6	0.09	0.0	0			230	M	M		3	· -	230
3	78	60	69	3	0	4	0.03	0.0	0			180	M	M	7	3	18	210
4	78	59	69	3	0	4	T	0.0	0			300	M	M	8		17	230
5	68	57	63	- 3	2	0	0.75	0.0	0			170	M	M		1	16	100
6	69	58	64	-2	1	0	0.17	0.0	0			220	M	M	7	1	36	220
7	70	56	63	-3	2	0	0.01	0.0	0			200	M	M	7		14	50
8	74	50	62	-4	3	0	0.00	0.0	0			280	M	M	6			280
9	79	54	67	2	0	2	0.00	0.0	0	5.7	13	320	M	M	8		28	90
10	82	60	71	6	0	6	0.00	0.0	0	5.9	14	330	M	M	5	8		310
11	94	58	76	11	0	11	0.00	0.0	0	6.4	16	100	M	M	0	8	20	90
12	88	59	74	9	0	9	0.00	0.0	0	4.0) 9	280	M	M	1		13	300
13	76	64	70	6	0	5	0.00	0.0	0	6.2	2 18	190	M	M	8		21	180
14	78	60	69	5	0	4	\mathbf{T}	0.0	0	4.7	16	220	M	M	7	18	20	230
15	84	59	72	8	0	7	0.00	0.0	0	3.9	10	100	M	M	5		12	270
16	76	61	69	5	0	4	0.08	0.0	0	5.0	16	250	M	M	8	1	22	30
17	72	55	64	1	1	0	0.00	0.0	0	3.2	2 10	290	M	M	5	12	14	280
18	86	52	69	6	0	4	0.00	0.0	0	2.2	2 12	350	M	M	2	18		260
19	70	54	62	-1	3	0	0.20	0.0	0	6.0	18	320	M	M	7	1	25	320
20	73	50	62	-1	3	0	0.00	0.0	0	4.7	7 13	310	M	M	2	8	16	320
21	85	50	68	6	0	3	0.00	0.0	0	10.8	3 26	80	M	M	2	8	32	80
22	92	54	73	11	0	8	0.00	0.0	0	5.5	15	130	M	M	2		20	110
23	87	52	70	8	0	5	0.00	0.0	0	3.5	14	330	M	M	6		21	320
24	71	57	64	3	1	0	0.00	0.0	0	7.1	. 15	320	M	M	5		21	320
25	77	54	66	5	0	1	0.00	0.0	0	3.5	13	330	M	M	3		18	320
26	74	52	63	2	2	0	0.00	0.0	0	5.6	15	300	M	M	2		20	310
27	83	49	66	5	0	1	0.00	M	0	7.7	23	80	M	M	1		28	80
28	68	48	58	-2	7	0	T	M	0	8.9	21	260	M	M	6		24	250
29	61	50	56	-4	9	0	0.04	0.0	0	6.8	18	260	M	M	7		26	300
30	62	46	54	-6	11	0	0.03	M	0	4.1	. 12	240	M	М	9		15	360

SM 2316 1652 45 86 1.40 0.0 163.1 M 154 5.4 FASTST M M 5 MAX (MPH) AV 77.2 55.1 MISC ---> # 28 220 # 36 220 ______ NOTES · # LAST OF SEVERAL OCCURRENCES COLUMN 17 PEAK WIND IN M.P.H. PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2 STATION: PORTLAND OR MONTH: SEPTEMBER 2009 YEAR: LATITUDE: 45 35 N LONGITUDE: 122 36 W [TEMPERATURE DATA] [PRECIPITATION DATA] SYMBOLS USED IN COLUMN 16 AVERAGE MONTHLY: 66.1 TOTAL FOR MONTH: 1.40 1 = FOG OR MIST DPTR FM NORMAL: 2.5 DPTR FM NORMAL: -0.25 2 = FOG REDUCING VISIBILITY GRTST 24HR 1.18 ON 18-19 TO 1/4 MILE OR LESS HIGHEST: 94 ON 11 LOWEST: 46 ON 30 3 = THUNDERSNOW, ICE PELLETS, HAIL 4 = ICE PELLETS TOTAL MONTH: 0.0 INCH 5 = HAIL GRTST 24HR 0.0 6 = FREEZING RAIN OR DRIZZLE GRTST DEPTH: 0 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS 8 = SMOKE OR HAZE [WEATHER - DAYS WITH] 9 = BLOWING SNOW [NO. OF DAYS WITH] X = TORNADOMAX 32 OR BELOW: 0 0.01 INCH OR MORE: MAX 90 OR ABOVE: 2 0.10 INCH OR MORE: 3 MIN 32 OR BELOW: 0 0.50 INCH OR MORE: 1 MIN 0 OR BELOW: 0 1.00 INCH OR MORE: 0 [HDD (BASE 65)] TOTAL THIS MO. 45 CLEAR (SCALE 0-3) DPTR FM NORMAL -33 PTCLDY (SCALE 4-7) 18 TOTAL FM JUL 1 63 CLOUDY (SCALE 8-10) 4 DPTR FM NORMAL -57 [CDD (BASE 65)] TOTAL THIS MO. 86 DPTR FM NORMAL 34 [PRESSURE DATA]
TOTAL FM JAN 1 627 HIGHEST SLP 30.38 ON 20 DPTR FM NORMAL 239 LOWEST SLP 29.60 ON 13

[REMARKS] #FINAL-09-09#

Explanation of the Preliminary Monthly Climate Data (F6) Product

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WFO Monthly/Daily Climate Data

000 CXUS55 KPQR 121731 CF6PDX PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: PORTLAND OR MONTH: OCTOBER YEAR: 2009 LATITUDE: 45 35 N LONGITUDE: 122 36 W

,	TEMPERATURE IN F:						PCPN:		: WONE	WIN	ID		: SUNS	SHINE	: SK		:PK V	MND
1	2	3	4	5	6A	6B	7	8	9 12Z	==== 10 AVG	:=== 11 MX	==== 12 2MIN	13	14	15	16	17	18
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW					MIN	PSBL	s-s	WX	SPD	DR
==:	====	:	====	====	====	====	=====	====	====	=====	===	====	====		-===:	====	=====	====
1	66	52	59	0	6	0	0.03	0.0	0	3.7	7 12	320	М	М	8	1	23	200
2	63	48	56	-3	9	0	Т	М	0			310	М	М	5		23	300
3	60	42	51	-7	14	0	0.03	M	0	3.6	17	50	М	M	6		22	50
4	67	47	57	-1	8	0	0.04	M	0	3.7	7 10	300	M	M	6		20	90
5	66	41	54	-4	11	0	0.00	M	0	4.9	10	130	M	M	3	128	13	320
6	69	40	55	-2	10	0	0.00	M	0	1.6	8	330	M	M	1	12	20	330
7	68	47	58	1	7	0	0.00	0.0	0	4.7	12	310	M	M	7		15	320
8	70	43	57	0	8	0	0.00	M	0	2.1	. 8	330	M	M	4	12	21	70
9	66	46	56	0	9	0	0.00	M	0	4.2	12	110	M	M	4	1	20	310
10	63	44	54	-2	11	0	0.00	M	0	10.6	22	90	M	M	5	8		100
11	57	39	48	- 8	17	0	0.00	M	0	12.6	25	80	M	M	6	8	29	90
12	59	48	54	-2	11	0	0.00	0.0	0	17.8	31	100	M	M	9			100
13	54	42	48	-7	17	0	0.08	M	0	21.6	35	90	M	M	9	17		100
14	67	46	57	2	8	0	0.15	M	0	13.8	25	220	М	M	8	1		220
15	63	53	58	3	7	0	${f T}$	0.0	0			120	M	M	9			110
16	71	58	65	11	0	0		0.0	0			110	M	M	8			120
17	66	57	62	8	3		0.37	0.0	0			110	М	M		138		110
18	65	53	59	5	6		0.01	0.0	0			190	M	М	9	1		190
19	64	51	58	5	7	-	0.18	0.0	0			300	M	M	8	1	24	20
20	61	51	56	3	9		0.00	0.0	0	2.4		320	M	M	9	1		270
21	64	52	58	5	7		0.38	0.0	0		-	190	M	M	8	1		190
22	57	47	52	0	13	0	T	M	0	2.2	-	110	M	M	9	12		290
23	62	48	55	3	10		0.42	M	0			210	M	М	9	1		220
24	60	43	52	0	13		0.00	M	0		-	310	M	M	5	1		340
25	56	41	49	-2	16		0.01	M	0	-	-	120	M	М	8	12		110
26	60	45	53	2	12	-	0.81	M	0			200	M	M	9	13		360
27	55	42	49	-2	16	-	0.05	M	0			300	M	M	6	-		290
28	52	41	47	- 4	18	-	0.03	M	0	2.3	_	110	M	M	9	1		150
29	57	44	51	1	14		0.27	M	0			110	M	M	10	1		110
30	63	57	60	10	5	0	0.07	0.0	0	9.8	24	200	M	M	10		33	190

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31 61 49 55 5 10 0 0.08 M 0 5.5 21 190 M M 8 1 28 190
______
SM 1932 1457 312 0 3.02 0.0 210.1 M 223
6.8 FASTST M M 7 MAX(MPH)
AV 62.3 47.0
                           MISC ---> # 35 90
                                                    # 44 100
______
NOTES:
# LAST OF SEVERAL OCCURRENCES
COLUMN 17 PEAK WIND IN M.P.H.
PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2
                                    STATION: PORTLAND OR
                                           OCTOBER
                                    MONTH:
                                            2009
                                    YEAR:
                                    LATITUDE: 45 35 N
                                    LONGITUDE: 122 36 W
[TEMPERATURE DATA] [PRECIPITATION DATA] SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 54.7 TOTAL FOR MONTH: 3.02 1 = FOG OR MIST
DPTR FM NORMAL: 0.4 DPTR FM NORMAL: 0.14
                                           2 = FOG REDUCING VISIBILITY
                    GRTST 24HR 0.83 ON 26-27
HIGHEST: 71 ON 16
                                               TO 1/4 MILE OR LESS
                                          3 = THUNDER
LOWEST:
         39 ON 11
                     SNOW, ICE PELLETS, HAIL 4 = ICE PELLETS
                     TOTAL MONTH: 0.0 INCH 5 = HAIL
                     GRTST 24HR
                                 0.0
                                            6 = FREEZING RAIN OR DRIZZLE
                                0
                     GRTST DEPTH:
                                           7 = DUSTSTORM OR SANDSTORM:
                                               VSBY 1/2 MILE OR LESS
                                           8 = SMOKE OR HAZE
[NO. OF DAYS WITH]
                    [WEATHER - DAYS WITH]
                                           9 = BLOWING SNOW
                                           X = TORNADO
MAX 32 OR BELOW: 0 0.01 INCH OR MORE: 18
MAX 90 OR ABOVE: 0 0.10 INCH OR MORE: 7
MIN 32 OR BELOW: 0 0.50 INCH OR MORE: 1
MIN 0 OR BELOW: 0 1.00 INCH OR MORE: 0
[HDD (BASE 65) ]
TOTAL THIS MO. 312 CLEAR (SCALE 0-3) 2
              -7 PTCLDY (SCALE 4-7) 15
DPTR FM NORMAL
TOTAL FM JUL 1 375 CLOUDY (SCALE 8-10) 14
DPTR FM NORMAL -64
[CDD (BASE 65) ]
TOTAL THIS MO.
               0
DPTR FM NORMAL -2 [PRESSURE DATA]
TOTAL FM JAN 1 627 HIGHEST SLP 30.37 ON 1
DPTR FM NORMAL 237 LOWEST SLP 29.13 ON 13
[REMARKS]
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#FINAL-10-09#

KMB00010104

Explanation of the Preliminary Monthly Climate Data (F6) Product

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KPQR 011230 CF6PDX PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: PORTLAND OR MONTH: NOVEMBER YEAR: 2009
LATITUDE: 45 35 N LONGITUDE: 122 36 W

	TEMPERATURE IN F:			-		PCPN:		: WOM	WIN				SHINE			:PK V		
1	==== 2	====: 3	 4	===: 5	====: 6A	==== 6B	===== 7	8	: 9	===== 10	11	====: 12	====: 13	14	:===: 15	: 16	 17	==== 18
_	-	,	-	7	011	OD.	•	•	12Z	AVG			10					
DΥ	MAX	MTN	AVG	DEP	нрр	ממט	WTR	SNW	DPTH				мти	PSRI.	S-S	WX	SPD	DR
1	56	38	47	-2	18	0	0.00	0.0	0	2.8	9	320	M	М	5	12	12	350
2	58	38	48	-1	17	0	0.00	M	0	1.8	10	20	M	M	7	12	12	20
3	60	35	48	-1	17	0	0.00	М	0	8.1	. 24	90	M	M	6	128	32	100
4	62	46	54	5	11	0	0.00	0.0	0	8.9	21	120	M	M	6		28	120
5	62	49	56	8	9	0	0.25	M	0	12.8	28	220	M	M	9	1	37	220
6	57	47	52	4	13	0	0.35	M	0	10.1	. 20	200	M	M	8	18	29	210
7	55	42	49	1	16	0	1.07	M	0	10.0	23	250	M	M	9	13	30	200
8	53	45	49	1	16	0	0.14	M	0	9.8	17	110	M	M	8	1	22	110
9	54	46	50	3	15	0	0.14	M	0	12.3	22	110	M	M	8	1	28	120
10	58	41	50	3	15	0	0.13	M	0	7.5	17	210	M	M	7	13	22	210
11	51	42	47	0	18	0	0.11	M	0	2.7	18	220	M	M	9	18		270
12	48	41	45	-2	20	0	0.14	M	0			170	M	M	10	1		160
13	47	39	43	-3	22	0	0.15	M	0	-		300	M	M	9	1		280
14	48	36	42	-4	23	0	T	M	0			120	M	M	8		-	120
15	48	42	45	-1	20	_	0.04	M		10.5			M	M	10			130
16	64	47	56	10	9		0.03	M		15.4			M	M	10			200
17	60	43	52	7	13		0.39	M		10.2			M	M		1		210
18	52	41	47	2	18		0.03	M		12.8			M	M	8			160
19	57	45	51	6	14		0.20	M		12.6			M	M	10	_		120
20	55	41	48	3	17		0.33	M	0			110	M	M	10			200
21	51	40	46	2	19		0.31	M	0	10.6			M	M	9	1		200
22	51	40	46	2	19	_	0.23	M	0	11.9			M	M	7	1		210
23	53	40	47	3	18	_	0.00	M	0			110	M	M	9			100
24	57	39	48	4	17	0	T	M	0			290	M	М	7	1		280
25	56	37	47	3	18	_	0.00	0.0	0			110	M	M	6	1		100
26	49	42	46	3	19	_	0.86	M	0			120	M	M	10	1		120
27	52	37	45	2	20	_	0.22	М	0			310	M	M	6	1		300
28	50	40	45	2	20	_	0.00	0.0	0	1.1	-	180	M	M	9	_	25	160
29	52	39	46	3	19	_	0.00	0.0	0	2.0	_		M	M	8	1		250
30	46	43	45	3	20	0	0.01	M	0	3.9	8	110	M	M	10	18	8	100

```
SM 1622 1241 510 0 5.13 0.0 233.3 M 246
7.8 FASTST M M 8 MAX(MPH)
AV 54.1 41.4
                                                     # 51 210
                            MISC ----> # 38 200
______
NOTES:
# LAST OF SEVERAL OCCURRENCES
COLUMN 17 PEAK WIND IN M.P.H.
PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2
                                     STATION: PORTLAND OR
                                     MONTH: NOVEMBER
                                             2009
                                     YEAR:
                                     LATITUDE: 45 35 N
                                     LONGITUDE: 122 36 W
[TEMPERATURE DATA] [PRECIPITATION DATA] SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 47.7 TOTAL FOR MONTH: 5.13 1 = FOG OR MIST DPTR FM NORMAL: 1.9 DPTR FM NORMAL: -0.48 2 = FOG REDUCING VISIBILITY
HIGHEST: 64 ON 16
                     GRTST 24HR 1.16 ON 6-7 TO 1/4 MILE OR LESS
                                            3 = THUNDER
         35 ON 3
LOWEST:
                     SNOW, ICE PELLETS, HAIL
                                            4 = ICE PELLETS
                     TOTAL MONTH: 0.0 INCH 5 = HAIL
                     GRTST 24HR
                                  0.0 6 = FREEZING RAIN OR DRIZZLE
                     GRTST DEPTH: 0
                                            7 = DUSTSTORM OR SANDSTORM:
                                                VSBY 1/2 MILE OR LESS
                                            8 = SMOKE OR HAZE
                                           9 = BLOWING SNOW
                    [WEATHER - DAYS WITH]
[NO. OF DAYS WITH]
                                            X = TORNADO
MAX 32 OR BELOW: 0 0.01 INCH OR MORE: 20
MAX 90 OR ABOVE: 0 0.10 INCH OR MORE: 16 MIN 32 OR BELOW: 0 0.50 INCH OR MORE: 2
MIN 0 OR BELOW: 0 1.00 INCH OR MORE: 1
[HDD (BASE 65) ]
TOTAL THIS MO. 510 CLEAR (SCALE 0-3) 0
DPTR FM NORMAL -50 PTCLDY (SCALE 4-7) 13
TOTAL FM JUL 1 885 CLOUDY (SCALE 8-10) 17
DPTR FM NORMAL -114
[CDD (BASE 65) ]
TOTAL THIS MO. 0
DPTR FM NORMAL 0 [PRESSURE DATA]
TOTAL FM JAN 1 627 HIGHEST SLP 30.46 ON 28
DPTR FM NORMAL 237 LOWEST SLP 29.39 ON 22
[REMARKS]
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#FINAL-11-09#

KMB00010106

Explanation of the Preliminary Monthly Climate Data (F6) Product

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KPQR 011231 CF6PDX PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: PORTLAND OR MONTH: DECEMBER YEAR: 2009
LATITUDE: 45 35 N LONGITUDE: 122 36 W

7	TEMPERATURE IN F:		:	PCPN:	:	: WONE	WIN	ID		:SUNS	SHINE	: SK	Y	:PK V	MND			
==:	====	====	====	====	====	=====		====:	=====	====	===	====:	====	=====	====	====:	=====:	====
1	2	3	4	5	6A	6B	7	8	9 12Z	10 AVG	11 MY	12	13	14	15	16	17	18
DΛ	MAX	MTN	AVC	משת	מחם	CDD	WTR	CNW					MTN	PSBL	9-9	WY	SPD	DB
																	3FD :=====	
					- -													
1	53	42	48	6	17	0	0.00	М	0	8.8	3 22	90	M	М	5	18	29	90
2	51	31	41	-1	24	0	0.00	M	0	10.8	3 26	100	M	М	0	8	33	100
3	47	35	41	-1	24	0	0.00	0.0	0	11.5	18	110	М	M	5	8	23	110
4	43	25	34	-8	31	0	T	М	0	1.5	10	310	M	M	5	18	12	310
5	44	27	36	-6	29	0	0.00	М	0	3.7	22	80	M	M	7	12	28	80
6	39	28	34	-7	31	0	0.00	M	0	19.6	37	80	M	M	6		43	70
7	31	23	27	-14	38	0	0.00	0.0	0	19.4	30	100	M	M	1		38	100
8	32	14	23	-18	42	0	0.00	M	0	9.5	22	80	M	M	1		25	80
9	30	12	21	-20	44	0	0.00	M	0	1.6	7	140	M	M	1		18	20
10	34	13	24	-17	41	0	0.00	M	0	1.2	2 5	240	M	M	1	18	8	10
11	34	14	24	-17	41	0	0.00	M	0	2.8	8	110	M	M	4	128	9	120
12	34	30	32	-8	33	0	0.01	M	0	3.3	8	130	M	M	10	16	9	130
13	41	25	33	-7	32	0	T	M	0	7.0	20	200	M	M	7	18	28	210
14	44	36	40	0	25	0	0.51	M	0	11.1	. 23	110	M	M	10	1	29	110
15	40	35	38	-2	27	0	1.08	M	0	14.6	26	120	M	M	10	1	32	110
16	51	38	45	5	20	0	0.54	M	0	10.7	18	100	M	M	8	1	21	100
17	46	37	42	2	23	0	0.06	M	0	6.1	. 14	110	M	M	8	12	17	120
18	50	34	42	2	23	0	T	M	0	5.2	15	110	M	M	8	12		120
19	46	42	44	4	21	0	0.06	M	0	8.0	15	110	M	M	10	1		110
20	48	44	46	6	19	0	0.14	M	0				M	M	10			110
21	52	38	45	5	20	0	0.30	M	0			320	M	M	9	1	25	310
22	42	29	36	-3	29	0	T	M	0	2.3	10	310	M	M	4	1	13	310
23	35	29	32	-7	33	0	0.00	0.0	0	1.6		310	M	M	10	12		220
24	38	28	33	-6	32	0	0.00	0.0	0	2.6			M	M	9			280
25	42	24	33	-6	32	0	0.00	M	0	12.5	29	110	M	M	1	12	37	100
26	42	34	38	-1	27	0	0.00	0.0	0	24.5	36	90	M	M	1		45	80
27	41	32	37	-2	28	0	T	M	0	14.4	23	100	M	M	9		29	100
28	43	27	35	-4	30	0	0.00	M	0		. 16		M	M	4		20	120
29	38	26	32	-7	33	-	0.16	M	M				M	M	7	1	28	120
30	38	32	35	-4	30	0	0.05	M	0	8.2	16	120	M	M	10	1	18	110

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31 42 34 38 -1 27 0 0.85 M 0 11.6 22 110 M M 10 1 26 110
______
SM 1291 918 906 0 3.76 0.0 271.2 M 191
______
                                  8.7 FASTST M M 6 MAX(MPH)
AV 41.6 29.6
                          MISC ---> # 37 80
                                                 # 45 80
______
NOTES ·
# LAST OF SEVERAL OCCURRENCES
COLUMN 17 PEAK WIND IN M.P.H.
PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2
                                  STATION: PORTLAND OR
                                  MONTH: DECEMBER
                                          2009
                                  YEAR:
                                  LATITUDE: 45 35 N
                                  LONGITUDE: 122 36 W
[TEMPERATURE DATA] [PRECIPITATION DATA] SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 35.6 TOTAL FOR MONTH: 3.76 1 = FOG OR MIST
DPTR FM NORMAL: -4.6 DPTR FM NORMAL: -1.95 2 = FOG REDUCING VISIBILITY
HIGHEST: 53 ON 1
                   GRTST 24HR 1.24 ON 14-15
                                            TO 1/4 MILE OR LESS
                                         3 = THUNDER
LOWEST:
         12 ON 9
                    SNOW, ICE PELLETS, HAIL 4 = ICE PELLETS
                    TOTAL MONTH: 0.0 INCH 5 = HAIL
                    GRTST 24HR
                               0.0
                                         6 = FREEZING RAIN OR DRIZZLE
                                          7 = DUSTSTORM OR SANDSTORM:
                    GRTST DEPTH:
                               0
                                             VSBY 1/2 MILE OR LESS
                                         8 = SMOKE OR HAZE
                   [WEATHER - DAYS WITH]
                                         9 = BLOWING SNOW
[NO. OF DAYS WITH]
                                         X = TORNADO
MAX 32 OR BELOW: 3 0.01 INCH OR MORE: 11 MAX 90 OR ABOVE: 0 0.10 INCH OR MORE: 7
MIN 32 OR BELOW: 19 0.50 INCH OR MORE: 4
MIN 0 OR BELOW: 0 1.00 INCH OR MORE: 1
[HDD (BASE 65) ]
TOTAL THIS MO. 906 CLEAR (SCALE 0-3) 7
DPTR FM NORMAL 150 PTCLDY (SCALE 4-7) 12
TOTAL FM JUL 1 1791 CLOUDY (SCALE 8-10) 12
DPTR FM NORMAL
              36
[CDD (BASE 65) ]
TOTAL THIS MO.
DPTR FM NORMAL 0 [PRESSURE DATA]
TOTAL FM JAN 1 627 HIGHEST SLP 30.49 ON 23
DPTR FM NORMAL 237 LOWEST SLP 29.65 ON 12
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[REMARKS] #FINAL-12-09#

Explanation of the Preliminary Monthly Climate Data (F6) Product

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WFO Monthly/Daily Climate Data

000 CXUS55 KPQR 011604 CF6PDX PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: PORTLAND OR MONTH: JANUARY
YEAR: 2010
LATITUDE: 45 35 N
LONGITUDE: 122 36 W

	TEMPERATURE IN F:				PCPN:		: WOM	WIN	-			SHINE			:PK V	NND		
1	2	3	4	5	==== 6A	==== 6B	7	8	9 12Z	10	11	====: 12 2MIN	13	14	15	16	17	18
	MAX						WTR		DPTH	SPD	SPD	DIR		PSBL			SPD	
1	53	40	47	8	18		0.65	M		12.9			M	М	_	1		200
2	53	41	47	8	18	0	T	M	0			190	M	M	8			210
3	46	40	43	4	22	0		0.0	0			110	M	M	10		20	110
4	45	41	43	4	22	_	0.41	M	_	11.3			M	M	10		28	110
5	47	42	45	6	20	_	0.28	M	0			110	M	M		1	23	110
6	46	41	44	5	21	0		M	0			100	M	M	9 7		40	100 90
7	44	39	42	3	23	0		0.0	0			90	M	M	-	,	40 32	110
8 9	42 44	37 37	40 41	1 2	25	0		M M	0	12.8		120	M M	M M	10 9	1	21	120
10	46	35	41	2	24 24	0	U.UZ T	M	-	12.4			M	M	8	_		110
11	46	40	43	3	22	0		M	0	12.9			M	M	10		28	110
12	47	40	44	4	21	_	0.32	M	0	10.8			M	M		1	28	110
13	51	42	47	7	18	•	0.32	M	0	14.1			M	M	8	1	38	170
14	52	40	46	6	19	_	0.00	0.0	0			110	M	M	9	_	25	100
15	54	45	50	10	15		0.89	М	0			110	М	М	9	1	-	120
16	49	45	47	7	18	_	0.17	М	0			120	M	M	10	ī	23	110
17	55	46	51	11	14	_	0.27	М	0	13.0			М	М	9	1		170
18	57	40	49	9	16	0	T	М	0			180	М	М	9			160
19	58	44	51	11	14	0	0.04	М	0	13.7	29	100	М	М	9		36	100
20	51	40	46	6	19	0	0.02	М	0	8.9	29	100	М	M	9		33	100
21	56	39	48	8	17	0	0.01	М	0	5.2	17	110	M	М	8		22	150
22	48	40	44	4	21	0	0.22	M	0	3.3	12	180	M	M	10	1	13	200
23	51	38	45	5	20	0	0.01	M	0	4.5	15	110	M	M	7		20	110
24	45	39	42	2	23	0	0.48	M	0	13.7	23	120	М	M	9	1	28	120
25	47	38	43	2	22	0	0.18	M	0	9.0	22	110	M	M	8	1	26	120
26	51	38	45	4	20	0	0.14	M	0	3.2	9	110	M	M	9	12	10	110
27	52	38	45	4	20	0	0.00	0.0	0	6.1	. 18	100	M	M	8	12	23	90
28	55	45	50	9	15	0	0.00	0.0	0	13.2	22	100	M	М	10	8	25	100
29	50	44	47	6	18	0	0.01	M	0	9.7	25	110	M	M	10		29	110
30	46	41	44	3	21	0	0.08	M	0	3.5	12	110	M	M	10		14	110

```
31 52 39 46 5 19 0 0.01 M 0 2.4 8 100 M M 6 1 10 180
______
SM 1539 1254 609 0 4.94 0.0 315.3 M 276
______
                                   10.2 FASTST M M 9 MAX(MPH)
AV 49.6 40.5
                            MISC ----> # 36 180
                                                    # 51 160
______
NOTES:
# LAST OF SEVERAL OCCURRENCES
COLUMN 17 PEAK WIND IN M.P.H.
PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2
                                     STATION: PORTLAND OR
                                            JANUARY
                                    MONTH:
                                            2010
                                    YEAR:
                                    LATITUDE: 45 35 N
                                    LONGITUDE: 122 36 W
[TEMPERATURE DATA] [PRECIPITATION DATA] SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 45.0 TOTAL FOR MONTH: 4.94 1 = FOG OR MIST
DPTR FM NORMAL: 5.1
                                           2 = FOG REDUCING VISIBILITY
                    DPTR FM NORMAL: -0.13
                     GRTST 24HR 1.09 ON 31- 1
HIGHEST: 58 ON 19
                                               TO 1/4 MILE OR LESS
                                           3 = THUNDER
LOWEST:
         35 ON 10
                     SNOW, ICE PELLETS, HAIL 4 = ICE PELLETS
                     TOTAL MONTH: 0.0 INCH 5 = HAIL
                     GRTST 24HR
                                 0.0
                                            6 = FREEZING RAIN OR DRIZZLE
                                            7 = DUSTSTORM OR SANDSTORM:
                     GRTST DEPTH:
                                  0
                                               VSBY 1/2 MILE OR LESS
                                           8 = SMOKE OR HAZE
                    [WEATHER - DAYS WITH]
                                           9 = BLOWING SNOW
[NO. OF DAYS WITH]
                                            X = TORNADO
MAX 32 OR BELOW: 0 0.01 INCH OR MORE: 23
MAX 90 OR ABOVE: 0 0.10 INCH OR MORE: 13
MIN 32 OR BELOW: 0 0.50 INCH OR MORE: 2
MIN 0 OR BELOW: 0 1.00 INCH OR MORE: 0
[HDD (BASE 65) ]
TOTAL THIS MO. 609 CLEAR (SCALE 0-3) 0
DPTR FM NORMAL -156 PTCLDY (SCALE 4-7) 6
TOTAL FM JUL 1 2400
                  CLOUDY (SCALE 8-10) 25
DPTR FM NORMAL -120
[CDD (BASE 65) ]
TOTAL THIS MO. 0
DPTR FM NORMAL 0 [PRESSURE DATA]
TOTAL FM JAN 1 0 HIGHEST SLP 30.32 ON 2
DPTR FM NORMAL 0 LOWEST SLP 28.93 ON 20
[REMARKS]
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#FINAL-01-10#

KMB00010110

Explanation of the Preliminary Monthly Climate Data (F6) Product

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

SM 1516 1092

000 CXUS55 KPQR 210226 CF6PDX PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: PORTLAND OR MONTH: FEBRUARY
YEAR: 2010
LATITUDE: 45 35 N
LONGITUDE: 122 36 W

			JRE :				PCPN:		SNOW:	MIN				SHINE			:PK 1	
1	2	3	4	5	6A	6B	7	8	9 12 Z	10	11	12 2MIN	13	14	15	16	17	18
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW					MIN	PSBL	s-s	WX	SPD	DR
===		====	====	====	====	=====		====	=====	====	===	====	====		== = :	====	=====	====
				_		_			_							_		
1	45	36	41	0	24	-	0.19	M	0			110	M	M	10	_		110
2	53	39	46	5	19	_	0.01	M	0			110	M	M	8	1		110
3	48	41	45	3	20	-	0.14	М	0			110	M	M	9	1	23	110
4	51	43	47	5	18	_	0.15	М	0	15.2			M	М	10	1	36	80
5	55	43	49	7	16		0.06	M	0	11.2			M	M	8	1	28	110
6	53	41	47	5	18		0.01	M	0	5.5			M	М	9			110
7	54	38	46	4	19		0.00	0.0	0	2.5			M	М	8		8	110
8	51	32	42	0	23	0	0.00	0.0	0			300	M	М	6	1		300
9	56	35	46	4	19	0	0.00	M	0			180	М	М	5	12		170
10	43	35	39	- 3	26	0	0.21	M	0	10.1	18	110	М	М	9	1	22	110
11	52	42	47	4	18	0	0.21	M	0	12.5	22	120	М	M	10	1	26	200
12	56	41	49	6	16	0	0.18	M	0	10.5			M	M	8	1		170
13	52	45	49	6	16	0	0.02	M	0	14.0	21	120	M	M	9		24	110
14	56	44	50	7	15	0	0.35	М	0	6.0	20	120	M	M	9	12	23	120
15	55	41	48	5	17	0	0.12	M	0	7.1	23	100	M	M	9	12	26	110
16	59	41	50	7	15	0	0.03	M	0	6.7	7 20	110	M	М	7	1	22	20
17	59	37	48	5	17	0	0.00	0.0	0	5.4	21	80	M	М	4	1	30	80
18	60	42	51	7	14	0	0.00	0.0	0	13.0	25	80	M	M	2		31	80
19	59	36	48	4	17	0	0.00	M	0	8.8	3 23	80	M	M	2		29	80
20	58	31	45	1	20	0	0.00	M	0	5.9	24	90	M	М	2	8	29	90
21	56	30	43	-1	22	0	0.00	M	0	6.2	18	80	M	M	0		22	70
22	55	27	41	-3	24	0	0.00	M	0	4.4	13	110	M	M	4		15	100
23	47	36	42	-2	23	0	0.33	M	0	4.4	13	120	M	M	9	1	16	110
24	56	41	49	5	16	0	0.11	M	0	7.6	20	220	M	M	9	1	23	200
25	56	42	49	4	16	0	0.06	M	0	7.5	18	100	M	M	7		22	120
26	54	47	51	6	14	0	0.58	M	0	9.3	26	180	M	M	10	1	36	170
27	58	44	51	6	14	0	Т	M	0	6.9	14	180	M	M	6		17	180
28	59	42	51	6	14	0	0.00	M	0	1.3	6	290	M	M	7	1	22	330
===				====	====	====	=====	====			===	====:	====	====	====	====		====
						_												

510 0 2.76 0.0 212.4

196

______ 7.6 FASTST M M 7 MAX(MPH) AV 54.1 39.0 # 36 80 MISC ---> # 30 80 ______ # LAST OF SEVERAL OCCURRENCES COLUMN 17 PEAK WIND IN M.P.H. PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2 STATION: PORTLAND OR MONTH: FEBRUARY 2010 YEAR: LATITUDE: 45 35 N LONGITUDE: 122 36 W [PRECIPITATION DATA] SYMBOLS USED IN COLUMN 16 [TEMPERATURE DATA] AVERAGE MONTHLY: 46.6 TOTAL FOR MONTH: 2.76 1 = FOG OR MIST DPTR FM NORMAL: 3.5 DPTR FM NORMAL: -1.42 2 = FOG REDUCING VISIBILITY HIGHEST: 60 ON 18 GRTST 24HR 0.64 ON 25-26 TO 1/4 MILE OR LESS LOWEST: 27 ON 22 3 = THUNDERSNOW, ICE PELLETS, HAIL 4 = ICE PELLETS TOTAL MONTH: 0.0 INCH 5 = HAIL GRTST 24HR 0.0 6 = FREEZING RAIN OR DRIZZLE GRTST DEPTH: 0 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS 8 = SMOKE OR HAZE 9 = BLOWING SNOW [NO. OF DAYS WITH] [WEATHER - DAYS WITH] X = TORNADOMAX 32 OR BELOW: 0 0.01 INCH OR MORE: 17 MAX 90 OR ABOVE: 0 0.10 INCH OR MORE: 11 MIN 32 OR BELOW: 4 0.50 INCH OR MORE: 1 MIN 0 OR BELOW: 0 1.00 INCH OR MORE: 0 [HDD (BASE 65)] TOTAL THIS MO. 510 CLEAR (SCALE 0-3) 4
DPTR FM NORMAL -95 PTCLDY (SCALE 4-7) 10
TOTAL FM JUL 1 2910 CLOUDY (SCALE 8-10) 14 DPTR FM NORMAL -215 [CDD (BASE 65)] TOTAL THIS MO. 0

DPTR FM NORMAL 0 [PRESSURE DATA]

TOTAL FM JAN 1 0 HIGHEST SLP 30.25 ON 17

DPTR FM NORMAL 0 LOWEST SLP 29.46 ON 26

[REMARKS] #FINAL-02-10#

Explanation of the Preliminary Monthly Climate Data (F6) Product

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KPQR 011230 CF6PDX PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

> STATION: PORTLAND OR

MONTH: MARCH 2010 YEAR: LATITUDE: 45 35 N LONGITUDE: 122 36 W

	ГЕМР						PCPN:		SNOW:	WIN	_			SHINE			:PK V	
1	2	3	4	5	6A	6B	7	8	9 12Z	10	11	12 2MIN	13	14	15	16	17	18
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW					MIN	PSBL	s-s	WX	SPD	DR
==:			====	====	====:	====				=====	===	====	====	====:	====:	====	=====	===
1	59	41	50	5	15	0	0.00	М	0	2.9	15	110	М	М	10	1	17	130
2	54	41	48	3	17	_	0.02	М	0		_	190	M	М	9	1	_ :	190
3	54	40	47	2	18	0	T	M	0	2.1			М	М	9	12	9	200
4	55	37	46	0	19	0	0.00	M	0	2.1	. 10	100	M	М	6	1	13	110
5	58	39	49	3	16	0	0.00	M	0	3.2	12	290	М	M	7	8	17	280
6	66	36	51	5	14	0	0.00	M	0	2.8	10	100	M	M	3		12	100
7	56	38	47	1	18	0	0.06	M	0	6.1	. 16	190	M	M	6		20	190
8	51	37	44	-2	21	0	0.02	M	0	9.9	33	320	М	M	6	5	40	320
9	49	34	42	-4	23	0	0.11	M	0	7.7	18	210	M	M	9	1	24	190
10	50	38	44	-2	21	0	0.07	M	0	6.7	15	110	M	M	8		18	110
11	51	41	46	-1	19	0	0.64	M	0	11.5	23	190	M	M	10	1	29	190
12	50	39	45	-2	20	0	0.20	M	0			220	M	M	10	18		170
13	51	38	45	-2	20	0	T	M	0		18		M	M	8		24	200
14	58	33	46	- 1	19	0	0.00	M	0			120	M	M	7	1	•	120
15	64	43	54	7	11	0	T	M	0			110	M	M	9	8		100
16	60	47	54	7	11	0	0.01	M	0			240	M	M	8			230
17	56	41	49	2	16	0	Т	M	0			320	M	M	6	8		310
18	61	30	46	-2	19	0	0.00	M	0			320	M	M	2			320
19	65	34	50	2	15		0.00	M	0	12.2		80	M	M	1		32	70
20	70	45	58	10	7	0	T	М	0	11.5			M	M	6			120
21	58	47	53	5	12	_	0.06	M	0		25		М	M	9	18		250
22	55	43	49	1	16		0.03	М	0		13		M	M	8	_		250
23	62	37	50	2	15	_	0.00	0.0	0		13		M	M	5	1		310
24	68	41	55	7	10		0.11	М	0			200	М	M	6			200
25	54	45	50	2	15		0.21	M	0	14.3			M	М	10			200
26	56	42	49	1	16		0.29	М	0			230	M	M	7	1		230
27	64	37	51	2	14	_	0.00	M	0		-	-	M	M	8	1		110
28	56	47	52	3	13		0.68	M	0	10.5		180	M	M	10	1		200
29	52	40	46	-3	19	-	0.87	М	0	14.0			M	M	9	1		190
30	47	39	43	-6	22	0	0.06	M	0	10.4	18	200	M	M	10	1	25	150

```
31 52 39 46 -3 19 0 0.14 M 0 5.7 14 310 M M 9 1 20 260
_______
SM 1762 1229 510 0 3.58 0.0 231.1 M 231
_______
                                  7.5 FASTST M M 7 MAX(MPH)
AV 56.8 39.6
                           MISC ---> # 33 320
                                                  # 44 190
_____
NOTES:
# LAST OF SEVERAL OCCURRENCES
COLUMN 17 PEAK WIND IN M.P.H.
PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2
                                   STATION: PORTLAND OR
                                           MARCH
                                   MONTH:
                                           2010
                                   YEAR:
                                   LATITUDE: 45 35 N
                                   LONGITUDE: 122 36 W
[TEMPERATURE DATA] [PRECIPITATION DATA] SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 48.2 TOTAL FOR MONTH: 3.58 1 = FOG OR MIST
DPTR FM NORMAL: 1.0 DPTR FM NORMAL: -0.13 2 = FOG REDUCING VISIBILITY
                    GRTST 24HR 0.87 ON 29-29
HIGHEST: 70 ON 20
                                              TO 1/4 MILE OR LESS
                                         3 = THUNDER
LOWEST:
         30 ON 18
                    SNOW, ICE PELLETS, HAIL 4 = ICE PELLETS
                    TOTAL MONTH: 0.0 INCH 5 = HAIL
                    GRTST 24HR
                                0.0
                                           6 = FREEZING RAIN OR DRIZZLE
                                           7 = DUSTSTORM OR SANDSTORM:
                    GRTST DEPTH:
                                0
                                              VSBY 1/2 MILE OR LESS
                                          8 = SMOKE OR HAZE
                   [WEATHER - DAYS WITH]
                                          9 = BLOWING SNOW
[NO. OF DAYS WITH]
                                          X = TORNADO
MAX 32 OR BELOW: 0 0.01 INCH OR MORE: 17 MAX 90 OR ABOVE: 0 0.10 INCH OR MORE: 9
MIN 32 OR BELOW: 1 0.50 INCH OR MORE: 3 MIN 0 OR BELOW: 0 1.00 INCH OR MORE: 0
[HDD (BASE 65) ]
TOTAL THIS MO. 510 CLEAR (SCALE 0-3) 3
DPTR FM NORMAL -26 PTCLDY (SCALE 4-7) 15
TOTAL FM JUL 1 3420 CLOUDY (SCALE 8-10) 13
DPTR FM NORMAL -241
[CDD (BASE 65) ]
TOTAL THIS MO. 0
DPTR FM NORMAL 0 [PRESSURE DATA]
TOTAL FM JAN 1 0 HIGHEST SLP 30.57 ON 17
DPTR FM NORMAL 0 LOWEST SLP 29.46 ON 29
[REMARKS]
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#FINAL-03-10#

Explanation of the Preliminary Monthly Climate Data (F6) Product

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KPQR 011230 CF6PDX PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

> STATION: PORTLAND OR

MONTH: APRIL YEAR: 2010 LATITUDE: 45 35 N LONGITUDE: 122 36 W

	rempi				-		PCPN:		SNOW:	WIN	-			SHINE			:PK 7	
1	2	3	4	5	6A	6B	7	8	9 12 Z	10	11	====: 12 2MIN	13	14	15	16	17	18
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW					MIN	PSBL	S-S	WX	SPD	DR
==:					====:	====		====	=====	====	===	====	====	=====	====	====	=====	====
_		2.0		_		•			•			100			_		2.4	200
1	54 52	38 40	46	-3	19		0.03	M	0			190 260	M M	M M	7 10	1	47	200 260
2	49	38	46 44	- 3	19 21	_	0.46	M M	0	14.5			M	M		1	32	200
4	53	40	47	-3 -2	18	_	0.08	M	0	15.4			M	M	9	1	39	100
5	51	36	44	-2 -6	21	_	0.20	M	0	16.2			M	M	9	_	46	190
6	55	42	49	-1	16	_	0.05	M	0		20		M	M	10	1	24	200
7	54	43	49	-1	16	_	0.08	М	0			190	M	M	10	1		190
8	50	38	44	-6	21		0.10	М	0		25		M	M	7	1	31	270
9	54	39	47	-3	18	0	0.02	М	0	4.6		330	М	М	7			340
10	61	34	48	-2	17	0	Т	M	0	12.7	30	100	M	М	7		38	70
11	65	46	56	6	9	0	0.02	M	0	5.2	15	300	М	M	9		18	250
12	63	48	56	5	9	0	0.27	M	0	4.9	14	320	M	M	7	1	17	330
13	61	43	52	1	13	0	0.05	M	0	4.7	13	350	M	M	7	1	18	350
14	65	35	50	-1	15	0	0.13	M	0	6.8	26	170	M	M	6		31	170
15	62	44	53	2	12	0	0.08	M	0	5.8	14	290	M	M	5	1	16	280
16	69	44	57	6	8	0	0.00	M	0	3.7	12	280	M	M	6		22	260
17	66	49	58	7	7	0	0.03	M	0	3.9	13	250	M	M	7	3		250
18	73	45	59	8	6	_	0.00	M	0	2.8	_	300	M	M	9	12		280
19	68	51	60	8	5	-	0.01	0.0	0			270	M	M	10			260
20	57	48	53	1.	12	_	0.01	M	0	9.9		310	М	М	9			310
21	57	47	52	0	13	-	0.01	М	0			310	M	M	9			320
22	62	43	53	1	12	_	0.00	0.0	0			320	M	M	5		18	300
23	63	39	51	-1	14	-	0.06	M	0			300	M	M	8	1		290
24	59	45	52	-1	13	_	0.04	M	0			250	M	M	8		25	250
25	65	41	53	0	12		0.00	M	0	2.5	_	290	M	M	8	-	15	20
26	63	50	57	4	8		0.40	0.0	0	12.6			M	M	10			190
27	55	46	51	-2	14	_	0.32	M	0	10.5		160	M	M		158	32	
28	54	44	49	-4	16	_	0.22	M	0			240	M	M	8	13		240
29	57	43	50	-4	15	_	0.13	M	0			300	M	M	8	15		300
30	57	44	51	- 3	14	U	0.04	М	0	5.0	Т.	300	М	M	9	1	18	290

_______ SM 1774 1283 413 0 2.92 0.0 237.8 M 242 ______ 7.9 FASTST M M 8 MAX(MPH) AV 59.1 42.8 MISC ----> # 39 260 # 47 260 ______ NOTES: # LAST OF SEVERAL OCCURRENCES COLUMN 17 PEAK WIND IN M.P.H. PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2 STATION: PORTLAND OR MONTH: APRIL 2010 YEAR: LATITUDE: 45 35 N LONGITUDE: 122 36 W [TEMPERATURE DATA] [PRECIPITATION DATA] SYMBOLS USED IN COLUMN 16 AVERAGE MONTHLY: 51.0 TOTAL FOR MONTH: 2.92 1 = FOG OR MIST DPTR FM NORMAL: -0.2 DPTR FM NORMAL: 0.28 2 = FOG REDUCING VISIBILITY HIGHEST: 73 ON 18 GRTST 24HR 0.70 ON 26-27 TO 1/4 MILE OR LESS 34 ON 10 3 = THUNDERLOWEST: SNOW, ICE PELLETS, HAIL 4 = ICE PELLETS TOTAL MONTH: 0.0 INCH 5 = HAIL GRTST 24HR 0.0 6 = FREEZING RAIN OR DRIZZLE GRTST DEPTH: 0 7 = DUSTSTORM OR SANDSTORM: VSBY 1/2 MILE OR LESS 8 = SMOKE OR HAZE [WEATHER - DAYS WITH] 9 = BLOWING SNOW [NO. OF DAYS WITH] X = TORNADOMAX 32 OR BELOW: 0 0.01 INCH OR MORE: 25 MAX 90 OR ABOVE: 0 0.10 INCH OR MORE: 9 MIN 32 OR BELOW: 0 0.50 INCH OR MORE: 0 MIN 0 OR BELOW: 0 1.00 INCH OR MORE: 0 [HDD (BASE 65)] CLEAR (SCALE 0-3) TOTAL THIS MO. 413 DPTR FM NORMAL 13 PTCLDY (SCALE 4-7) TOTAL FM JUL 1 3833 CLOUDY (SCALE 8-10) 15 DPTR FM NORMAL -228 [CDD (BASE 65)] TOTAL THIS MO. 0 DPTR FM NORMAL -1 [PRESSURE DATA]

TOTAL FM JAN 1 0 HIGHEST SLP 30.37 ON 25

DPTR FM NORMAL -1 LOWEST SLP 29.44 ON 26 [REMARKS] #FINAL-04-10#

KMB00010116

Explanation of the Preliminary Monthly Climate Data (F6) Product

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KPQR 101621 CF6PDX PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: PORTLAND OR

7	rempi	ERATU	JRE :				PCPN:		SNOW:	MIN				SHINE			:PK V	WND
1	2	3	4	==== 5	==== 6A	===== 6B	7	8	9	10	11	12	13	14	15	16	17	18
DY	MAX	MIN	AVG	DEP	HDD	CDD	WTR	SNW	12Z DPTH			2MIN DIR	MIN	PSBL	s-s	WX	SPD	DR
==:			-===	===:	===:		=====	====	=====		===	====	====	=====			====:	====
1	61	48	55	1	10	0	0.01	0.0	0	10.4	20	320	М	M	9		25	320
2	61	47	54	0	11	0	T	0.0	0	7.5	17	200	M	M	9		22	230
3	54	42	48	-6	17	0	0.23	0.0	0	13.0	26	300	M	M	8	1	33	300
4	50	41	46	-9	19	0	0.17	0.0	0	4.0	18	330	M	M	8	15	24	320
5	53	41	47	-8	18	0	0.17	0.0	0	5.6	22	300	M	M	8	18	29	300
6	59	41	50	-5	15	0	0.00	0.0	0	1.8	8	330	M	M	7		12	350
7	68	42	55	0	10	0	${f T}$	0.0	0	5.6	24	120	M	M	7		30	130
8	69	44	57	1	8	0	0.00	0.0	0	4.8	16	320	M	M	3		21	340
9	71	42	57	1	8	0	0.04	0.0	0	5.6	21	320	M	M	4	8	25	320
10	61	47	54	-2	11	0	0.13	0.0	0	7.2	18	310	M	M	8	1	24	320
11	62	50	56	0	9	0	0.00	0.0	0	4.6	17	310	M	M	9		21	320
12	65	48	57	1	8	0	0.00	0.0	0	7.2	14	310	M	M	8		17	340
13	74	46	60	3	5	0	0.00	0.0	0	4.6	12	290	M	M	4		15	290
14	76	49	63	6	2	0	0.00	0.0	0	5.0	14	310	M	M	3	8	16	320
15	74	50	62	5	3	0	0.00	0.0	0			320	M	M	7		M	30
16	74	52	63	6	2	0	0.03	0.0	0			100	M	M	8		13	100
17	75	54	65	8	0	0	0.83	0.0	0	6.3	14	190	M	M	9	13	16	170
18	64	52	58	0	7	0	0.05	0.0	0	8.7		200	M	M	9	18		200
19	67	48	58	0	7	0	0.35	0.0	0	12.6		230	M	М	8	1	45	240
20	56	44	50	- 8	15	0	0.32	0.0	0			190	M	M	8	1358		180
21	54	45	50	- 8	15	0	0.25	0.0	0			250	M	M	10	13	28	
22	56	44	50	-8	15	0	0.20	0.0	0		16		M	M	9			300
23	54	44	49	- 9	16	0	0.25	0.0	0	5.6	20	110	M	M	9	158	22	110
24	61	43	52	-7	13	0	Т	0.0	0			160	M	M	9		18	170
25	64	51	58	-1	7	0	0.38	0.0	0	4.2	20	80	M	M	10	13	26	90
26	59	49	54	-5	11	0	0.58	0.0	0	4.5	17	200	M	M	6	1	22	200
27	64	45	55	- 4	10	0	0.01	0.0	0	4.4	15	320	M	M	8		20	320
28	57	49	53	-6	12	0	0.38	0.0	0	6.6	16	270	M	M	9	1	20	260
29	61	49	55	- 5	10	0	0.06	0.0	0			210	M	M	9	1	13	180
30	65	52	59	-1	6	0	0.12	0.0	0	2.9	10	300	M	M	10	1	13	300

```
31 71 53 62 2 3 0 0.12 0.0 0 8.4 17 280 M M 8 8 24 210
______
SM 1960 1452 303 0 4.68 0.0 193.4 M 241
______
                                  6.2 FASTST M M 8 MAX (MPH)
                          MISC ---> # 30 230
                                                 # 45 240
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NOTES:
# LAST OF SEVERAL OCCURRENCES
COLUMN 17 PEAK WIND IN M.P.H.
PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2
                                  STATION: PORTLAND OR
                                          MAY
                                  MONTH:
                                  YEAR:
                                           2010
                                  LATITUDE: 45 35 N
                                  LONGITUDE: 122 36 W
[TEMPERATURE DATA] [PRECIPITATION DATA] SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 55.0 TOTAL FOR MONTH: 4.68 1 = FOG OR MIST
DPTR FM NORMAL: -2.1 DPTR FM NORMAL: 2.30 2 = FOG REDUCING VISIBILITY
HIGHEST: 76 ON 14 GRTST 24HR 0.86 ON 17-18
                                            TO 1/4 MILE OR LESS
         41 ON 6, 5
LOWEST:
                                          3 = THUNDER
                   SNOW, ICE PELLETS, HAIL 4 = ICE PELLETS TOTAL MONTH: 0.0 INCH 5 = HAIL
                    GRTST 24HR 0.0
                                         6 = FREEZING RAIN OR DRIZZLE
                    GRTST DEPTH:
                                          7 = DUSTSTORM OR SANDSTORM:
                              0
                                             VSBY 1/2 MILE OR LESS
                                         8 = SMOKE OR HAZE
                                         9 = BLOWING SNOW
[NO. OF DAYS WITH]
                   [WEATHER - DAYS WITH]
                                         X = TORNADO
MAX 32 OR BELOW: 0 0.01 INCH OR MORE: 21
MAX 90 OR ABOVE: 0 0.10 INCH OR MORE: 15
MIN 32 OR BELOW: 0 0.50 INCH OR MORE: 2
MIN 0 OR BELOW: 0 1.00 INCH OR MORE: 0
[HDD (BASE 65) ]
                 CLEAR (SCALE 0-3)
TOTAL THIS MO. 303
DPTR FM NORMAL 60 PTCLDY (SCALE 4-7) 12
TOTAL FM JUL 1 4136 CLOUDY (SCALE 8-10) 17
DPTR FM NORMAL -168
[CDD (BASE 65) ]
TOTAL THIS MO. 0
DPTR FM NORMAL -14 [PRESSURE DATA]
TOTAL FM JAN 1 0 HIGHEST SLP 30.45 ON 4
DPTR FM NORMAL -15 LOWEST SLP 29.68 ON 19
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[REMARKS] #FINAL-05-10#

Explanation of the Preliminary Monthly Climate Data (F6) Product

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

WFO Monthly/Daily Climate Data

000 CXUS55 KPQR 011740 CF6PDX PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6)

STATION: PORTLAND OR

MONTH: JUNE
YEAR: 2010
LATITUDE: 45 35 N
LONGITUDE: 122 36 W

	rempi	ERAT	JRE :	IN F	:	:	: PCPN:	\$	SNOW:	WIN	1 D		: SUNS	SHINE	SK	ľ	:PK V	ND
_	= === :	3	==== 4	====: 5	====: 6A	==== 6B	===== 7	====: 8	=== = : 9	 10	11	12	====: 13	-==== 14	15	16	====== 17	18
1	2	3	4	5	OA	d.o	,	0	12Z	AVG			13	1.4	13	10	1,	10
DΥ	MAX	MTN	AVG	DEP	пан	ממט	WTR	SNW	DPTH				MTN	PSBL	s-s	WX	SPD	DR
																	======	===
1	63	53	58	-2	7	0	0.22	0.0	0	5.5	15	190	M	M	10	1	21	210
2	65	52	59	-1	6	0	0.67	0.0	0	10.7	18	200	M	M	10	18	25	190
3	62	46	54	-6	11	0	0.27	M	0	3.9	15	210	M	M	9	1	20	210
4	63	50	57	-4	8	0	0.45	0.0	0	5.3	12	320	M	M	9	1	16	360
5	74	47	61	0	4	0	0.00	M	0	4.2		280	M	M	6			290
6	63	57	60	-1	5		1.48	0.0	0	2.1	_	330	M	M	10			320
7	69	54	62	1	3	-	0.01	0.0	0			320	M	M	6	1	М	M
8	71	50	61	0	4	-	0.14	0.0	0			230	M	M	7	1		220
9	63	52	58	-3	7	_	0.27	0.0	0			200	M	M	7		29	
10	59	52	56	-6	9	_	0.32	0.0	0			280	M	M	10	1		280
11	64	52	58	-4	7	-	0.00	0.0	0			310	M	M	8	4	-	320 320
12	81	50 51	66	4	0	-	0.00	0.0	0			320 310	M M	M M	3 2	1		320
13 14	72 65	51 46	62 56	0 -6	3 9	_	0.00	0.0	0			320	M	M	7			330
15	57	48	53	-10	12		0.38	0.0 M	0	4.5		260	M	M	8	1		260
16	59	48	54	-10	11	_	0.38	M	0	3.5		100	M	M	10	1		190
17	63	52	58	-5	7		0.00	0.0	0		_	310	M	M	9	_		350
18	69	49	59	-4	6	0	Т	М	0	4.6		310	М	М	7			280
19	68	53	61	-2	4	0	0.01	0.0	0	4.2		320	М	M	9			320
20	59	53	56	-7	9	0	0.02	0.0	0	2.5	16	220	M	M	10	1	25	260
21	66	54	60	-4	5	0	0.00	0.0	0	3.2	9	320	M	M	9		14	250
22	75	55	65	1	0	0	0.00	0.0	0	3.4	12	310	M	M	9		14	300
23	83	60	72	8	0	7	0.00	0.0	0	5.1	. 13	280	M	M	6	8	16	330
24	81	56	69	5	0	4	0.00	0.0	0	6.4	14	320	M	M	3	8	18	320
25	73	56	65	0	0	0	0.00	0.0	0	6.4	13	320	М	M	7		17	330
26	77	54	66	1	0	1	0.00	0.0	0	5.0	10	330	M	M	5	8		320
27	82	54	68	. 3	0	3	0.00	0.0	0	5.2	14	310	M	M	3			310
28	76	57	67	2	0	2	0.00	0.0	0	6.8	17	320	M	M	6	8		330
29	70	52	61	-4	4	0	0.00	0.0	0			320	M	M	7			320
30	71	50	61	- 5	4	0	0.00	0.0	0	5.9	15	300	М	M	6		17	310

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SM 2063 1563 145 18 4.27 0.0 161.2 M 218
______
                                    5.4 FASTST M M 7 MAX (MPH)
AV 68.8 52.1
                           MISC ---> # 23 200
_______
# LAST OF SEVERAL OCCURRENCES
COLUMN 17 PEAK WIND IN M.P.H.
PRELIMINARY LOCAL CLIMATOLOGICAL DATA (WS FORM: F-6) , PAGE 2
                                    STATION: PORTLAND OR
                                             JUNE
                                    MONTH:
                                            2010
                                    YEAR:
                                    LATITUDE: 45 35 N
                                    LONGITUDE: 122 36 W
[TEMPERATURE DATA] [PRECIPITATION DATA] SYMBOLS USED IN COLUMN 16
AVERAGE MONTHLY: 60.4 TOTAL FOR MONTH: 4.27 1 = FOG OR MIST
DPTR FM NORMAL: -2.3 DPTR FM NORMAL: 2.68 2 = FOG REDUCING VISIBILITY
HIGHEST: 83 ON 23 GRTST 24HR 1.48 ON 6-6 TO 1/4 MILE OR LESS
LOWEST:
         46 ON 14, 3
                                           3 = THUNDER
                     SNOW, ICE PELLETS, HAIL 4 = ICE PELLETS
                     TOTAL MONTH: 0.0 INCH 5 = HAIL
                     GRTST 24HR
                                 0.0 6 = FREEZING RAIN OR DRIZZLE
                     GRTST DEPTH:
                                0
                                            7 = DUSTSTORM OR SANDSTORM:
                                                VSBY 1/2 MILE OR LESS
                                            8 = SMOKE OR HAZE
[NO. OF DAYS WITH]
                    [WEATHER - DAYS WITH]
                                           9 = BLOWING SNOW
                                           X = TORNADO
MAX 32 OR BELOW: 0 0.01 INCH OR MORE: 13
MAX 90 OR ABOVE: 0 0.10 INCH OR MORE: 9
MIN 32 OR BELOW: 0 0.50 INCH OR MORE: 2
MIN 0 OR BELOW: 0 1.00 INCH OR MORE: 1
[HDD (BASE 65) ]
TOTAL THIS MO. 145 CLEAR (SCALE 0-3)
DPTR FM NORMAL 49 PTCLDY (SCALE 4-7)
                                      15
TOTAL FM JUL 1 4281 CLOUDY (SCALE 8-10) 12
DPTR FM NORMAL -119
[CDD (BASE 65) ]
TOTAL THIS MO. 18
DPTR FM NORMAL -25 [PRESSURE DATA]
TOTAL FM JAN 1 18 HIGHEST SLP 30.39 ON 11
DPTR FM NORMAL -40 LOWEST SLP 29.61 ON 4
[REMARKS]
```

#FINAL-06-10#

KMB00010120

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Tuesday, March 2, 2010

Katrina Greene Kinder Morgan Terminal 5 15550 N Lombard Portland, OR 97203

RE: Zinc Lake / [none] Convey on Leg

Enclosed are the results of analyses for work order <u>A10B291</u>, which was received by the laboratory on 2/26/2010 at 3:00:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: AGreiner@Apex-Labs.com, or by phone at 503-718-2323.

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Zinc Lake

15550 N Lombard

Project Number: [none]

Portland, OR 97203

Project Manager: Katrina Greene

Reported: 03/02/10 11:26

ANALYTICAL REPORT FOR SAMPLES

	SA	MPLE INFORMAT	ION	
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Zinc/Conveyor Leg	A10B291-01	Water	02/26/10 08:45	02/26/10 15:00

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Zinc Lake

15550 N Lombard

Project Number: [none]

Portland, OR 97203

Project Manager: Katrina Greene

Reported:

03/02/10 11:26

ANALYTICAL SAMPLE RESULTS

	Total Metals by EPA 6020 (ICPMS)													
			Reporting											
Analyte	Result	MDL	Limit	Units	Dilution	Date Analyzed	Method	Notes						
Zinc/Conveyor Leg (A10B291-01)			Matrix: Water		Batch: 10030	04								
Zinc	1310	***	20.0	ug/L	5	03/01/10 13:58	EPA 6020							

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Zinc Lake

15550 N Lombard Portland, OR 97203 Project Number: [none]
Project Manager: Katrina Greene

Reported:

03/02/10 11:26

QUALITY CONTROL (QC) SAMPLE RESULTS

			DRAFT: T	otal Meta	Is by EP	A 6020 (IC	PMS)				
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD Limit	Notes
Batch 1003004 - EPA 3015	A						Wa	ter			
Blank (1003004-BLK1)				Pro	epared: 03/	01/10 08:33	Analyzed:	03/01/10 1	3:24		
EPA 6020										·	
Zinc	ND		4.00	ug/L	1					 	
LCS (1003004-BS1)				Pro	epared: 03/	01/10 08:33	Analyzed:	03/01/10 1	3:27		
EPA 6020					-						
Zinc	56.1		4.00	ug/L	1	55.6		101	80-120%	 	
LCS (1003004-BS2)				Pro	epared: 03/	01/10 15:03	Analyzed:	03/01/10 1	7:07		
EPA 6020											
Zinc	55.6		4.00	ug/L	1	55.6		100	80-120%	 	

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Zinc Lake

15550 N Lombard Portland, OR 97203

Project Number: [none]

Project Manager: Katrina Greene

Reported:

03/02/10 11:26

SAMPLE PREPARATION INFORMATION

			Total Metals by Ef	PA 6020 (ICPMS)			
Prep: EPA 3015A Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1003004 A10B291-01	Water	EPA 6020	02/26/10 08:45	03/01/10 08:33	45mL/50mL	45mL/50mL	1.00

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Zinc Lake

15550 N Lombard

Project Number: [nonc]

Reported:

Portland, OR 97203

Project Manager: Katrina Greene

03/02/10 11:26

Notes and Definitions

Qualifiers:

Notes and Conventions:

DET

Analyte DETECTED

ND

Analyte NOT DETECTED at or above the reporting limit

NR

Not Reported

dry

Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.

RPD

Relative Percent Difference

MDL

If MDL is not listed, data has been evaluated to the Method Reporting Limit only.

WMSC

Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.

Batch QC Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Blank Policy Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.

For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.

Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5Project: Zinc Lake15550 N LombardProject Number: [none]Reported:Portland, OR 97203Project Manager: Katrina Greene03/02/10 11:26

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Friday, March 5, 2010

Katrina Greene Kinder Morgan Terminal 5 15550 N Lombard Portland, OR 97203

RE: Zinc Lake / [none]

Enclosed are the results of analyses for work order <u>A10B252</u>, which was received by the laboratory on 2/24/2010 at 1:40:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: AGreiner@Apex-Labs.com, or by phone at 503-718-2323.

Apex Laboratories

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Zinc Lake

Project Number: [none]

Project Manager: Katrina Greene

Reported: 03/05/10 14:07

ANALYTICAL REPORT FOR SAMPLES

	SA	MPLE INFORMATI	ON	
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Zinc Lake	A10B252-01	Water	02/24/10 12:05	02/24/10 13:40

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Allison Greiner For Darwin Thomas, Business Development Director

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Zinc Lake

15550 N Lombard

Project Number: [none]

Reported:

Portland, OR 97203

Project Manager: Katrina Greene

03/05/10 14:07

ANALYTICAL SAMPLE RESULTS

Total Metals by EPA 6020 (ICPMS)												
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes				
Zinc Lake (A10B252-01)			Matrix: Water		Batch: 10024	16		<u> </u>				
Zinc	551		4.00	ug/L	1	02/26/10 15:13	EPA 6020					

Apex Laboratories

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Zinc Lake

15550 N Lombard

Project Number: [none]

Portland, OR 97203

Project Manager: Katrina Greene

Reported: 03/05/10 14:07

ANALYTICAL SAMPLE RESULTS

		Diss	olved Metals by	EPA 60	20 (ICPMS)			
			Reporting					
Analyte	Result	MDL	Limit	Units	Dilution	Date Analyzed	Method	Notes
Zinc Lake (A10B252-01)			Matrix: Water		Batch: 10030	07		
Zinc	507		4.00	ug/L	1	03/01/10 14:43	EPA 6020 (Diss)	FILT

Apex Laboratories

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Zinc Lake

15550 N Lombard

Project Number: [none]

Reported:

Portland, OR 97203

Project Manager: Katrina Greene

03/05/10 14:07

QUALITY CONTROL (QC) SAMPLE RESULTS

			Total	Total Metals by EPA 6020 (ICPMS)												
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes				
Batch 1002416 - EPA 30	15A						Wat	er								
Blank (1002416-BLK1)				Pro	epared: 02/	25/10 14:19	Analyzed:	02/26/10 1	3:56							
EPA 6020																
Zinc	ND		4.00	ug/L	1											
LCS (1002416-BS1)				Pre	epared: 02/	25/10 14:19	Analyzed:	02/26/10 1	3:59							
EPA 6020																
Zinc	55.8		4.00	ug/L	1	55.6		100	80-120%							

Apex Laboratories

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Zinc Lake

15550 N Lombard Portland, OR 97203 Project Number: [none]
Project Manager: Katrina Greene

Reported: 03/05/10 14:07

QUALITY CONTROL (QC) SAMPLE RESULTS

Dissolved Metals by EPA 6020 (ICPMS)											
Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
A - Dissolv	red					Wat	ter				
		 	Pro	epared: 03/	01/10 10:48	Analyzed:	03/01/10 14	:01			
ND		4.00	ug/L	1							
			Pro	epared: 03/	01/10 10:48	Analyzed:	03/01/10 14	:04			
	_										
ND		4.00	ug/L	1							,
			Pro	epared: 03/	01/10 10:48	Analyzed:	03/01/10 14	:07			
											
ND		4.00	ug/L	1							
			Pro	epared: 03/	01/10 10:48	Analyzed:	03/01/10 14	:10			
56.2		4.00	ug/L	1	55.6		101 8	80-120%			
	ND ND	ND ND	Result MDL Reporting Limit 6A - Dissolved ND 4.00 ND 4.00 ND 4.00	Result MDL Reporting Limit Units 5A - Dissolved Property ND 4.00 ug/L ND 4.00 ug/L ND 4.00 ug/L ND 4.00 ug/L Property Property Property	Result MDL Reporting Limit Units Dil. 5A - Dissolved Prepared: 03/ ND 4.00 ug/L 1 ND 4.00 ug/L 1 ND 4.00 ug/L 1 Prepared: 03/ ND 4.00 ug/L 1 Prepared: 03/	Result MDL Reporting Limit Units Dil. Spike Amount 5A - Dissolved Prepared: 03/01/10 10:48 ND 4.00 ug/L 1 Prepared: 03/01/10 10:48 ND 4.00 ug/L 1 Prepared: 03/01/10 10:48 ND 4.00 ug/L 1 Prepared: 03/01/10 10:48	Result MDL Limit Units Dil. Amount Result	Result MDL Reporting Limit Units Dil. Spike Amount Source Result %REC 5A - Dissolved Water Prepared: 03/01/10 10:48 Analyzed: 03/01/10 14 ND 4.00 ug/L 1 Prepared: 03/01/10 10:48 Analyzed: 03/01/10 14 ND 4.00 ug/L 1 Prepared: 03/01/10 10:48 Analyzed: 03/01/10 14 ND 4.00 ug/L 1 Prepared: 03/01/10 10:48 Analyzed: 03/01/10 14	Result MDL Limit Units Dil. Spike Source Result %REC Limits	Result MDL Reporting Limit Units Dil. Spike Amount Source Result %REC Limits RPD SA - Dissolved Water Prepared: 03/01/10 10:48 Analyzed: 03/01/10 14:01 ND 4.00 ug/L 1	Result MDL Reporting Units Dil. Spike Amount Result %REC Limits RPD Limit

Apex Laboratories

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Zinc Lake

15550 N Lombard

Project Number: [none]

Portland, OR 97203 Project Manager: Katrina Greene

Reported: 03/05/10 14:07

SAMPLE PREPARATION INFORMATION

			Total Metals by EF	PA 6020 (ICPMS)			
Prep: EPA 3015A					Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1002416							
A10B252-01	Water	EPA 6020	02/24/10 12:05	02/25/10 14:19	45mL/50mL	45mL/50mL	1.00
		C	issolved Metals by	EPA 6020 (ICPMS)			
Prep: EPA 3015A	- Dissolved				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1003007							
A10B252-01	Water	EPA 6020 (Diss)	02/24/10 12:05	03/01/10 10:48	45mL/50mL	45mL/50mL	1.00

Apex Laboratories

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: Zinc Lake

15550 N Lombard

Project Number: [none]

Reported:

Portland, OR 97203

Project Manager: Katrina Greene

03/05/10 14:07

Notes and Definitions

Qualifiers:

FILT Sample was lab filtered and acid preserved prior to analysis. See sample preparation section of report for date and time of filtration.

Notes and Conventions:

DET

Analyte DETECTED

ND

Analyte NOT DETECTED at or above the reporting limit

NR

Not Reported

dry

Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.

RPD

Relative Percent Difference

MDL

If MDL is not listed, data has been evaluated to the Method Reporting Limit only.

WMSC

Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.

Batch QC

Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Blank Policy Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.

For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.

Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

Apex Laboratories

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Allison Greiner For Darwin Thomas, Business Development Director

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: Zinc Lake

Project Number: [none]

Project Manager: Katrina Greene

Reported:

03/05/10 14:07

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Apex Laboratories

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Saturday, February 13, 2010

Katrina Greene Kinder Morgan Terminal 5 15550 N Lombard Portland, OR 97203

RE: General / [none]

Enclosed are the results of analyses for work order <u>A10B113</u>, which was received by the laboratory on 2/10/2010 at 5:40:00PM.

Thank you for using Apex Labs. We appreciate your business and strive to provide the highest quality services to the environmental industry.

If you have any questions concerning this report or the services we offer, please feel free to contact me by email at: dthomas@apex-labs.com, or by phone at 503-718-2323.

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: General

15550 N Lombard

Project Number: [none]

Portland, OR 97203

Project Manager: Katrina Greene

Reported: 02/13/10 12:08

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Zinc Impact Area	A10B113-01	Water	02/10/10 14:28	02/10/10 17:40

SAMPLE INFORMATION

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: General

15550 N Lombard Portland, OR 97203 Project Number: [none]

Project Manager: Katrina Greene

Reported:

02/13/10 12:08

ANALYTICAL SAMPLE RESULTS

		To	otal Metals by EF	A 6020	(ICPMS)			
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes
Zinc Impact Area (A10B113-01)			Matrix: Water	01110	Batch: 10021	78		
Zinc	0.779		0.0200	mg/L	5	02/11/10 16:54	EPA 6020	

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: General

15550 N Lombard

Project Number: [none]

Reported:

Portland, OR 97203

Project Manager: Katrina Greene

02/13/10 12:08

ANALYTICAL SAMPLE RESULTS

		Diss	olved Metals by	EPA 60	20 (ICPMS)			
			Reporting					·
Analyte	Result	MDL	Limit	Units	Dilution	Date Analyzed	Method	Notes
Zinc Impact Area (A10B113-01)			Matrix: Water		Batch: 10022	10		
Zinc	0.713		0.0200	mg/L	5	02/12/10 17:22	EPA 6020 (Diss)	FILT

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: General

15550 N Lombard

Project Number: [none]

Reported:

Portland, OR 97203

Project Manager: Katrina Greene

02/13/10 12:08

QUALITY CONTROL (QC) SAMPLE RESULTS

	DRAFT: Total Metals by EPA 6020 (ICPMS)											
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits		RPD Limit	Notes
Batch 1002178 - EPA 3015A							Wat	ter				
Blank (1002178-BLK1)				Pro	pared: 02/	11/10 10:45	Analyzed:	02/11/10 10	6:20		-	
EPA 6020												
Zinc	ND		0.00400	mg/L	1							
LCS (1002178-BS1)				Pro	epared: 02/	11/10 10:45	Analyzed:	02/11/10 10	6:22			
EPA 6020		, , , , ,										
Zinc	0.0577		0.00400	mg/L	1	0.0556		104	80-120%			

DRAFT REPORT

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: General

15550 N Lombard Portland, OR 97203

Project Number: [none]

Project Manager: Katrina Greene

Reported:

02/13/10 12:08

QUALITY CONTROL (QC) SAMPLE RESULTS

		ı	DRAFT: Diss	solved Me	tals by	EPA 6020 ((ICPMS)					
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1002210 - EPA 3	015A - Dissolv	ed					Wat	ter				
Blank (1002210-BLK1)				Pro	epared: 02/	12/10 11:48	Analyzed:	02/12/10 16	5:49			
EPA 6020 (Diss)						· · · · · · · · · · · · · · · · · · ·					***	
Zinc	ND		0.00400	mg/L	1				***			
LCS (1002210-BS1)				Pre	epared: 02/	12/10 11:48	Analyzed:	02/12/10 16	5:52			
EPA 6020 (Diss)												
Zinc	0.0565		0.00400	mg/L	1	0.0556		102	80-120%			

DRAFT REPORT

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: General

15550 N Lombard

Project Number: [none]

Portland, OR 97203

Project Manager: Katrina Greene

Reported:

02/13/10 12:08

SAMPLE PREPARATION INFORMATION

			Total Metals by El	PA 6020 (ICPMS)			
Prep: EPA 3015A Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor
Batch: 1002178 A10B113-01	Water	EPA 6020	02/10/10 14:28	02/11/10 10:45	45mL/50mL	45mL/50mL	1.00
			Dissolved Metals by	EPA 6020 (ICPMS)	······································		
Prep: EPA 3015A -	Dissolved				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1002210 A10B113-01	Water	EPA 6020 (Diss)	02/10/10 14:28	02/12/10 11:48	45mL/50mL	45mL/50mL	1.00
Prep: Lab Filtration	n				Sample	Default	RL Prep
Lab Number	Matrix	Method	Sampled	Prepared	Initial/Final	Initial/Final	Factor
Batch: 1002182 A10B113-01	Water	NA	02/10/10 14:28	02/11/10 11:20	50mL/50mL	lmL/lmL	NA

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Kinder Morgan Terminal 5

Project: General

15550 N Lombard

Project Number: [none]

Reported:

Portland, OR 97203

Project Manager: Katrina Greene

02/13/10 12:08

Notes and Definitions

Qualifiers:

FILT

Sample was lab filtered and acid preserved prior to analysis. See sample preparation section of report for date and time of filtration.

Notes and Conventions:

DET

Analyte DETECTED

ND

Analyte NOT DETECTED at or above the reporting limit

NR

Not Reported

dгу

Sample results reported on a dry weight basis. Results listed as 'wet' or without 'dry'designation are not dry weight corrected.

RPD

Relative Percent Difference

MDL

If MDL is not listed, data has been evaluated to the Method Reporting Limit only.

WMSC

Water Miscible Solvent Correction has been applied to Results and MRLs for volatiles soil samples per EPA 8000C.

Batch QC

Unless specifically requested, this report contains only results for Batch QC derived from client samples included in this report. All analyses were performed with the appropriate Batch QC (including Sample Duplicates, Matrix Spikes and/or Matrix Spike Duplicates) in order to meet or exceed method and regulatory requirements. Any exceptions to this will be qualified in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

Blank Policy Apex assesses blank data for potential high bias down to a level equal to ½ the method reporting limit (MRL), except for conventional chemistry and HCID analyses which are assessed only to the MRL. Sample results flagged with a B or B-02 qualifier are potentially biased high if they are less than ten times the level found in the blank for inorganic analyses or less than five times the level found in the blank for organic analyses.

For accurate comparison of volatile results to the level found in the blank; water sample results should be divided by the dilution factor, and soil sample results should be divided by 1/50 of the sample dilution to account for the sample prep factor.

Results qualified as reported below the MRL may include a potential high bias if associated with a B or B-02 qualified blank. B and B-02 qualifications are not applied to J qualified results reported below the MRL.

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

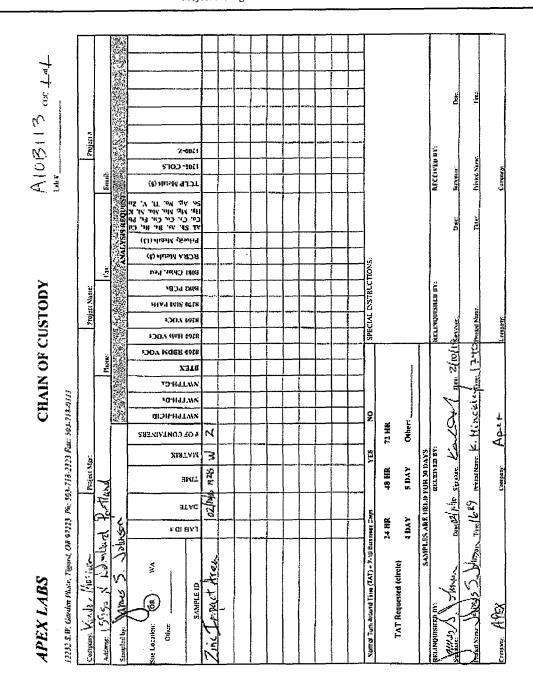
Kinder Morgan Terminal 5

15550 N Lombard Portland, OR 97203 Project: General

Project Number: [none]

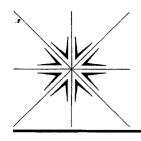
Project Manager: Katrina Greene

Reported: 02/13/10 12:08



DRAFT REPORT

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Specialty Analytical

11711 SE Capps Road Clackamas, OR 97015 (503) 607-1331 Fax (503) 607-1336

January 15, 2010

Jack Waller
Kinder Morgan Bulk Terminal #5
15550 N. Lombard
Portland, OR 97203

TEL: (503) 285-4500 FAX: (503) 285-7733

RE: Zn Impact Area

Dear Jack Waller:

Order No.: 0912222

Specialty Analytical received 1 sample on 12/31/2009 for the analyses presented in the following report.

REVISED REPORT VERSION 1. Please see case narrative for information on revision.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

Project Manager

Specialty Analytical, An Oregon Corporation

Date: 15-Jan-10

CLIENT:

Kinder Morgan Bulk Terminal #5

Project:

Zn Impact Area

Lab Order:

0912222

CASE NARRATIVE

Report Revision 1.

Data was reviewed and corrected values are included for zinc by EPA 200.7.

Date: 15-Jan-10

CLIENT:

Kinder Morgan Bulk Terminal #5

Project:

Zn Impact Area

Lab Order:

0912222

Lab ID:

0912222-01

Collection Date: 12/31/2009 8:24:00 AM

Client Sample ID: Zn Impact Area

Matrix: STORM WATER

Analyses

Zinc

Result

0.632

Limit Qual Units

DF

Date Analyzed

ICP METALS

E200.7

0.0100

mg/L

Analyst: zau 1/5/2010 5:49:18 PM

Date: 15-Jan-10

CLIENT:

Kinder Morgan Bulk Terminal #5

Work Order:

0912222

Project:

Zn Impact Area

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

- L 15													
Sample ID:	MBLK-24722	SampType:	MBLK	TestCod	e: 200. 7	Units: mg/L		Prep Dat	e: 1/4/201	0	Run ID: TJ/	A IRIS_10010)5E
Client ID:	ZZZZZ	Batch ID:	24722	TestN	lo: E200.7			Analysis Date	e: 1/ 5/201	0	SeqNo: 650	0880	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			0.0018	0.0100									J
Sample ID:	LCS-24722	SampType:	LCS	TestCoo	e: 200.7	Units: mg/L		Prep Dat	e: 1/4/201	0	Run ID: TJ/	A IRIS_10010)5E
Client ID:	ZZZZZ	Batch ID:	24722	TestN	lo: E200.7			Analysis Dat	e: 1/6/201	0	SeqNo: 651	040	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			0.518	0.0100	0.5	0.0018	103	92.3	111	0	0		
Sample ID:	0912227-01BMS	SampType:	MS	TestCod	e: 200.7	Units: mg/L	<u> </u>	Prep Dat	e: 1/4/201	0	Run ID: TJ	A IRIS_10010)5E
Client ID:	ZZZZZ	Batch ID:	24722	TestN	lo: E200.7			Analysis Dat	e: 1/5/201	0	SeqNo: 650	0884	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			16.69	0.0100	0.5	16.97	-56	93	110	0	0		S,MC
Sample ID:	0912227-01BMSD	SampType:	MSD	TestCod	le: 200.7	Units: mg/L		Prep Dat	e: 1/4/201	0	Run ID: TJ	A IRIS_10010)5E
Client ID:	ZZZZZ	Batch ID:	24722	TestN	lo: E200.7			Analysis Dat	e: 1/5/201	0	SeqNo: 650)885	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			16.68	0.0100	0.5	16.97	-58	93	110	16.69	0.0599	20	S,MC
Sample ID:	0912227-01BDUP	SampType:	DUP	TestCoo	le: 200.7	Units: mg/L		Prep Dat	e: 1/4/201	0	Run ID: TJ	A IRIS_10010)5E
Client ID:	ZZZZZ	Batch ID:	24722	TestN	lo: E200.7			Analysis Dat	e: 1/5/201	0	SeqNo: 650	1883	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			16.4	0.0100	0	0	0	0	0	16.97	3.42	20	

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Page 1 of 3

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

Kinder Morgan Bulk Terminal #5

Work Order:

0912222

Project:

Zn Impact Area

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID: Client ID:	SampType: Batch ID:		TestCod TestN	e: 200.7 o: E200.7	Units: mg/L		Prep Date Analysis Date		0	Run ID: TJA IRIS_1001 SeqNo: 650879	05E
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit	Qual
Zinc		0.5058	0.0100	0.5	0	101	90	110	0	0	
Sample ID: Client ID:	SampType: Batch ID:		TestCod TestN	e: 200.7 o: E200.7	Units: mg/L		Prep Date Analysis Date		0	Run ID: TJA IRIS_1001 SeqNo: 650888	05E
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit	Qual
Zinc		0.5243	0.0100	0.5	0	105	90	110	0	0	
Sample ID: Client ID:	SampType: Batch ID:		TestCod TestN	e: 200.7 o: E200.7	Units: mg/L		Prep Date		0	Run ID: TJA IRIS_1001 SeqNo: 650899	05E
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit	Qual
Zinc		0.5281	0.0100	0.5	0	106	90	110	0	0	
Sample ID: Client ID:	SampType: Batch ID:		TestCod TestN	e: 200.7 o: E200.7	Units: mg/L		Prep Date		0	Run ID: TJA IRIS_1001 SeqNo: 651041	05E
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit	Qual
Zinc		0.5075	0.0100	0.5	0	102	90	110	0	0	
Sample ID: Client ID:	SampType: Batch ID:		TestCod TestN	e: 200.7 o: E200.7	Units: mg/L		Prep Date		0	Run ID: TJA IRIS_1001 SeqNo: 650878	05E
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit	Qual
Zinc		0.5067	0.0100	0.5	0	101	95	105	0	0	
Sample ID: Client ID:	SampType: Batch ID:		TestCod TestN	e: 200.7 o: E200.7	Units: mg/L		Prep Date		0	Run ID: TJA IRIS_1001 SeqNo: 651039	05E
Analyte		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit	Qual

Qualifiers:

ND - Not Detected at the Reporting Limit

Page 2 of 3

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

Kinder Morgan Bulk Terminal #5

Work Order:

0912222

Project:

Zn Impact Area

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID: ICV	SampType: ICV	TestCode: 200.7	Units: mg/L		Prep Da	te:		Run ID: TJ	A IRIS_10010)5E
Client ID: ZZZZZ	Batch ID: 24722	TestNo: E200.7			Analysis Dat	te: 1/6/201	0	SeqNo: 651	1039	
Analyte	Result	PQL SPK value	e SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.5167	0.0100 0.	5 0	103	95	105	0	0		

KEY TO FLAGS

- A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards.
- A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
- A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- B The blank exhibited a positive result greater than the reporting limit for this compound.
- CN See Case Narrative.
- D Result is based from a dilution.
- E Result exceeds the calibration range for this compound. The result should be considered as estimate.
- F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- H Sample was analyzed outside recommended hold time.
- HT At clients request, sample was analyzed outside recommended hold time.
- J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
- K Diesel result is biased high due to amount of Oil contained in the sample.
- L Diesel result is biased high due to amount of Gasoline contained in the sample.
- M Oil result is biased high due to amount of Diesel contained in the sample.
- N Gasoline result is biased high due to amount of Diesel contained in the sample.
- MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
- MI Result is outside control limits due to matrix interference.
- MSA Value determined by Method of Standard Addition.
- O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
- P Detection levels of Methylene Chloride may be laboratory contamination, due to previous analysis or background levels.
- Q Detection levels elevated due to sample matrix.
- R RPD control limits were exceeded.
- RF Duplicate failed due to result being at or near the method-reporting limit.
- RP Matrix spike values exceed established QC limits, post digestion spike is in control.
- S Recovery is outside control limits.
- SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
- * The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

			CHAIN	0	F C	US	STO	DY	R	EC	DR	D				Pageof
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Relinquished By:

Received For Lab By:

Company:

Time

Received By:

Company:

Pink-Customer Copy

Date

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.

Yellow-Project File

Samples held beyond 60 days subject to storage fee(s)

Relinquished By

Copies: White-Original

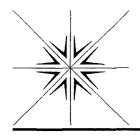
Company:

Time

Time

Date

Date



11711 SE Capps Road Clackamas, OR 97015 (503) 607-1331 Fax (503) 607-1336

December 28, 2009

Jack Waller Kinder Morgan Bulk Terminal #5 15550 N. Lombard Portland, OR 97203

TEL: (503) 285-4500 FAX: (503) 285-7733

RE: Zn Impact Area

Dear Jack Waller:

Order No.: 0912193

Specialty Analytical received 1 sample on 12/16/2009 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Project Manager

Date: 28-Dec-09

CLIENT:

Kinder Morgan Bulk Terminal #5

Project:

Zn Impact Area

Lab Order:

0912193

Lab ID:

0912193-01

Collection Date: 12/16/2009 9:40:00 AM

Client Sample ID: Zn Impact Area

Matrix: STORM WATER

Analyses

Result

Limit Qual Units

DF **Date Analyzed**

ICP METALS

1.67

Zinc

E200.7 0.0100

mg/L

Analyst: zau 12/17/2009 1

Date: 28-Dec-09

CLIENT:

Kinder Morgan Bulk Terminal #5

Work Order:

0912193

Project: Zi

Zn Impact Area

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID:	MBLK-24605	SampType:	MBLK	TestCod	e: 200. 7	Units: mg/L		Prep Date	: 12/17/2009	1	Run ID: TJA	IRIS 09121	7D
Client ID:	ZZZZZ	Batch ID:			o: E200.7	Olino. High		Analysis Date			SeqNo: 646		,,,
Gillorik IB.		Baton 13.		10001	o. L200			7 triaryolo Date	. 12/1//2000	,	00q/10: 0 40	240	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit Rf	PD Ref Val	%RPD	RPDLimit	Qual
Zinc			ND	0.0100									
Sample ID:	LCS-24605	SampType:	LCS	TestCod	e: 200. 7	Units: mg/L		Prep Date	: 12/17/2009)	Run ID: TJA	IRIS_09121	7D
Client ID:	ZZZZZ	Batch ID:	24605	TestN	o: E200.7			Analysis Date	: 12/17/2009)	SeqNo: 646	247	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RF	PD Ref Val	%RPD	RPDLimit	Qual
Zinc			0.5051	0.0100	0.5	0	101	92.3	111	0	0		
Sample ID:	A0912115-02CMS	SampType:	MS	TestCod	e: 200.7	Units: mg/L		Prep Date	e: 12/17/2009)	Run ID: TJA	RIS_09121	7D
Client ID:	ZZZZZ	Batch ID:	24605	TestN	lo: E200.7			Analysis Date	: 12/17/2009	•	SeqNo: 646	250	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RI	PD Ref Val	%RPD	RPDLimit	Qual
Zinc			0.6192	0.0100	0.5	0.097	104	93	110	0	0		
Sample ID:	A0912115-02CMSD	SampType:	MSD	TestCod	le: 200.7	Units: mg/L		Prep Date	: 12/17/2009)	Run ID: TJA	NIRIS_09121	7D
Client ID:	ZZZZZ	Batch ID:	24605	TestN	lo: E200.7			Analysis Date	e: 12/17/2009	•	SeqNo: 646	251	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit Rf	PD Ref Val	%RPD	RPDLimit	Qual
Zinc			0.6003	0.0100	0.5	0.097	101	93	110	0.6192	3.10	20	
Sample ID:	A0912115-02CDUP	SampType:	DUP	TestCod	le: 200.7	Units: mg/L		Prep Date	e: 12/17/2009)	Run ID: TJA	\ IRIS_09121	7D
Client ID:	ZZZZZ	Batch ID:	24605	TestN	lo: E200.7			Analysis Date	e: 12/17/200 9)	SeqNo: 646	249	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit RI	PD Ref Val	%RPD	RPDLimit	Qual
Zinc			0.0962	0.0100	0	0	0	0	0	0.097	0.828	20	

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

Kinder Morgan Bulk Terminal #5

Work Order:

0912193

Project:

Zn Impact Area

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID:	CCV	SampType:	ccv	TestCod	e: 200. 7	Units: ma/L		Prep Date	e:		Run ID: TJA	IRIS 09121	7D
Client ID:	ZZZZZ	Batch ID:	24605	TestN	o: E200.7	•		Analysis Date		2009	SeqNo: 6462		
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			0.4974	0.0100	0.5	0	99.5	90	110	0	0		
Sample ID:	ccv	SampType:	ccv	TestCod	e: 200. 7	Units: mg/L		Prep Date	e:		Run ID: TJA	IRIS_09121	7D
Client ID:	ZZZZZ	Batch ID:	24605	TestN	o: E200.7			Analysis Date	e: 12/17/2	2009	SeqNo: 6462	252	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			0.4939	0.0100	0.5	0	98.8	90	110	0	0		
Sample ID:	ccv	SampType:	CCV	TestCod	e: 200 .7	Units: mg/L		Prep Date	e:		Run ID: TJA	IRIS_09121	7D
Client ID:	ZZZZZ	Batch ID:	24605	TestN	o: E200.7			Analysis Date	e: 12/17/2	2009	SeqNo: 6462	263	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			0.4894	0.0100	0.5	0	97.9	90	110	0	0		
Sample ID:	ccv	SampType:	ccv	TestCod	e: 200.7	Units: mg/L		Prep Date	e:		Run ID: TJA	IRIS_09121	7D
Client ID:	ZZZZZ	Batch ID:	24605	TestN	o: E200.7			Analysis Date	e: 12/17/2	2009	SeqNo: 6462	274	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			0.4964	0.0100	0.5	0	99.3	90	110	0	0		
Sample ID:	ccv	SampType:	CCV	TestCod	e: 200.7	Units: mg/L		Prep Date	e:		Run ID: TJA	IRIS_09121	17D
Client ID:	ZZZZZ	Batch ID:	24605	TestN	o: E200.7			Analysis Date	e: 12/17/2	2009	SeqNo: 6466	542	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			0.5024	0.0100	0.5	0	100	90	110	0	0		
Sample ID:	ICV	SampType:	ICV	TestCod	e: 200.7	Units: mg/L		Prep Date	e:		Run ID: TJA	IRIS_09121	17D
Client ID:	ZZZZZ	Batch ID:	24605	TestN	o: E200.7			Analysis Date	e: 12/17/2	2009	SeqNo: 646 2	244	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

Kinder Morgan Bulk Terminal #5

Work Order:

0912193

Project:

Zn Impact Area

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID: ICV	SampType: ICV	TestCod	e: 200.7	Units: mg/L		Prep Dat	te:		Run ID: TJ	A IRIS_09121	17D
Client ID: ZZZZZ	Batch ID: 24605	TestN	o: E200.7		Analysis Date: 12/17/2009				SeqNo: 646	244	
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc	0.5163	0.0100	0.5	0	103	95	105	0	0		

KEY TO FLAGS

- A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards.
- A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
- A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- B The blank exhibited a positive result greater than the reporting limit for this compound.
- CN See Case Narrative.
- D Result is based from a dilution.
- E Result exceeds the calibration range for this compound. The result should be considered as estimate.
- F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- H Sample was analyzed outside recommended hold time.
- HT At clients request, sample was analyzed outside recommended hold time.
- J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
- K Diesel result is biased high due to amount of Oil contained in the sample.
- L Diesel result is biased high due to amount of Gasoline contained in the sample.
- M Oil result is biased high due to amount of Diesel contained in the sample.
- N Gasoline result is biased high due to amount of Diesel contained in the sample.
- MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
- MI Result is outside control limits due to matrix interference.
- MSA Value determined by Method of Standard Addition.
- O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
- P Detection levels of Methylene Chloride may be laboratory contamination, due to previous analysis or background levels.
- Q Detection levels elevated due to sample matrix.
- R RPD control limits were exceeded.
- RF Duplicate failed due to result being at or near the method-reporting limit.
- RP Matrix spike values exceed established QC limits, post digestion spike is in control.
- S Recovery is outside control limits.
- SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
- * The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

Rev Dec 15, 2004

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Collected By: Signature Printed	Specia 11711 SE C Clackamas, Phone: 503- Fax: 503-60	OR 97015 -607-1331					Addre Addre Phon Proje	ect No	K ISSS VCH Loca	M CeAn C		() () () () () () () () () ()	Simble Simple Si	Se 9 Proje	EK Waller 27203 Fax Cot Name ZN TAME Other P.O.	XICH bli	req
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	ust M																
Relinquished By/Company:	MAC	Date Time	Received Company	-	<u> </u>				<u> </u>		Reline Comp		ed By:			Date	Time

Received For Lab By

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.

Yellow-Project File

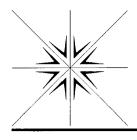
Pink-Customer Copy

Samples held beyond 60 days subject to storage fee(s)

Copies: White-Original

Date 15/04

Time



11711 SE Capps Road Clackamas, OR 97015 (503) 607-1331 Fax (503) 607-1336

November 17, 2009

Jack Waller Kinder Morgan Bulk Terminal #5 15550 N. Lombard Portland, OR 97203

TEL: (503) 285-4500 FAX: (503) 285-7733

RE: NOV 13 ZINC

Dear Jack Waller:

Order No.: 0911075

Specialty Analytical received 1 sample on 11/13/2009 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Project Manager

Technical Reviev

Date: 17-Nov-09

CLIENT:

Kinder Morgan Bulk Terminal #5

Project:

NOV 13 ZINC

Lab Order:

0911075

Lab ID:

Analyses

0911075-01

Collection Date: 11/13/2009 2:35:00 PM

Client Sample ID: Zinc

Matrix: AQUEOUS

Limit Qual Units

DF

Date Analyzed

ICP METALS Zinc

Result 0.262

E200.7 0.0100

mg/L

Analyst: zau 11/16/2009 3:54:10 PM

Page 1 of 1

Date: 17-Nov-09

CLIENT:

Kinder Morgan Bulk Terminal #5

Work Order:

0911075

Project:

NOV 13 ZINC

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

	MBLK-24396	SampType: Batch ID:		TestCod	e: 200.7 o: E200.7	Units: mg/L		Prep Date			Run ID: TJ/	_	16C
Analyte		Baton 15.	Result	PQL		SPK Ref Val	%REC	,		RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			ND	0.0100									
Sample ID:	LCS-24396	SampType:	LCS	TestCod	e: 200.7	Units: mg/L		Prep Date	e: 11/16/2	009	Run ID: TJ/	A IRIS_09111	16C
Client ID:	ZZZZZ	Batch ID:	24396	TestN	o: E200.7			Analysis Date	e: 11/16/2	009	SeqNo: 639	876	
Analyte			Result	PQL [.]	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			0.5368	0.0100	0.5	0	107	92.3	111	0	0		
Sample ID:	0911049-01CMS	SampType:	MS	TestCod	e: 200.7	Units: mg/L		Prep Date	e: 11/16/2	009	Run ID: TJ/	A IRIS_09111	16C
Client ID:	ZZZZZ	Batch ID:	24396	TestN	o: E200.7			Analysis Date	e: 11/16/2	009	SeqNo: 639	883	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit ·	Qual
Zinc			0.5603	0.0100	0.5	0.0386	104	93	110	0	0		
Sample ID:	0911049-01CMSD	SampType:	MSD	TestCod	e: 200.7	Units: mg/L		Prep Date	e: 11/16/2	1009	Run ID: TJ/	A IRIS_09111	16C
Client ID:	ZZZZZ	Batch ID:	24396	TestN	lo: E200.7			Analysis Date	e: 11/16/2	2009	SeqNo: 639	884	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			0.5634	0.0100	0.5	0.0386	105	93	110	0.5603	0.552	20	
Sample ID:	0911049-01CDUP	SampType:	DUP	TestCod	e: 200.7	Units: mg/L		Prep Date	e: 11/16/2	1009	Run ID: TJ	A IRIS_09111	16C
Client ID:	ZZZZZ	Batch ID:	24396	TestN	lo: E200.7			Analysis Date	e: 11/16/2	2009	SeqNo: 639	882	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			0.0383	0.0100	0	0	0	0	0	0.0386	0.780	20	

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

Kinder Morgan Bulk Terminal #5

Work Order:

0911075

Project:

NOV 13 ZINC

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID:	CCV	SampType:	CCV	TestCode: 200.7 Units: mg/L				D D			5 15 714 1510 0	
,		,				Units: mg/L		Prep Dat			Run ID: TJA IRIS_0	91116C
Client ID:	ZZZZZ	Batch ID:	24396	I estN	lo: E200.7			Analysis Dat	e: 11/16/2	2009	SeqNo: 639874	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLi	nit Qual
Zinc			0.5136	0.0100	0.5	0	103	90	110	0	0	
Sample ID:	ccv	SampType:	ccv	TestCoo	de: 200 .7	Units: mg/L		Prep Dat	te:	1.00 1.01	Run ID: TJA IRIS_0	91116C
Client ID:	ZZZZZ	Batch ID:	24396	Test	No: E200.7			Analysis Dat	e: 11/16/2	2009	SeqNo: 639880	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLi	mit Qual
Zinc			0.5192	0.0100	0.5	0	104	90	110	0	0	
Sample ID:	ccv	SampType:	ccv	TestCoo	de: 200.7	Units: mg/L		Prep Dat	e:		Run ID: TJA IRIS_0	91116C
Client ID:	ZZZZZ	Batch ID:	24396	TestN	to: E200.7			Analysis Dat	e: 11/16/2	2009	SeqNo: 639891	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLi	mit Qual
Zinc			0.5034	0.0100	0.5	0	101	90	110	0	0	
Sample ID:	ccv	SampType:	ccv	TestCod	de: 200.7	Units: mg/L		Prep Dat	:e:		Run ID: TJA IRIS_0	91116C
Client ID:	ZZZZZ	Batch ID:	24396	TestN	lo: E200.7			Analysis Dat	e: 11/16/2	2009	SeqNo: 639902	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLi	nit Qual
Zinc			0.5073	0.0100	0.5	0	101	90	110	0	0	
Sample ID:	ICV	SampType:	ICV	TestCoo	de: 200.7	Units: mg/L		Prep Dat	le:		Run ID: TJA IRIS_0	91116C
Client ID:	ZZZZZ	Batch ID:	24396	TestN	No: E200.7			Analysis Dat	e: 11/16/2	2009	SeqNo: 639873	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLi	nit Qual
Zinc			0.5044	0.0100	0.5	0	101	95	105	0	0	

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Page 2 of 2

KEY TO FLAGS

- A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards.
- A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
- A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- B The blank exhibited a positive result greater than the reporting limit for this compound.
- CN See Case Narrative.
- D Result is based from a dilution.
- E Result exceeds the calibration range for this compound. The result should be considered as estimate.
- F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- H Sample was analyzed outside recommended hold time.
- HT At clients request, sample was analyzed outside recommended hold time.
- J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
- K Diesel result is biased high due to amount of Oil contained in the sample.
- L Diesel result is biased high due to amount of Gasoline contained in the sample.
- M Oil result is biased high due to amount of Diesel contained in the sample.
- N Gasoline result is biased high due to amount of Diesel contained in the sample.
- MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
- MI Result is outside control limits due to matrix interference.
- MSA Value determined by Method of Standard Addition.
- O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
- P Detection levels of Methylene Chloride may be laboratory contamination, due to previous analysis or background levels.
- Q Detection levels elevated due to sample matrix.
- R RPD control limits were exceeded.
- RF Duplicate failed due to result being at or near the method-reporting limit.
- RP Matrix spike values exceed established QC limits, post digestion spike is in control.
- S Recovery is outside control limits.
- SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
- * The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

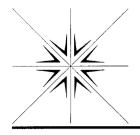
Rev Dec 15, 2004

CHAIN OF CUSTODY RECORD

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Specialty Analytical

Specialty Analytical 11711 SE Capps Road Clackamas, OR 97015 Phone: 503-607-1331 Fax: 503-607-1336				Cor Add	iress_	あれず	on ZZ	ole Ole	オイイン	NS UA	000	L Walle An T-S Invard 27203 Pax 503		}}=
Collected By:					ject N							ct Name NDV		
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Signature					<u> </u>	Anal	yses					For Labo	oratory Use	
Turn Around Time Normal 5-7 Business Days		Containers										7.77	ient	
Specify Rush Analyses Must Be Scheduled With The Lab In Advance		No. of Co	Zn									Temperature On Rece Specialty Analytical Co Specialty Analytical Tr	ontainers? Y	//N
Date Time Sample I.D.	Matrix		_\			ļ						Comments		Lab I.D.
11/13/09/1435 Ame Lako			X		┨	 								
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	Received Company:	-							nquish ipany:	ed By:			Date	Time
Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt. Samples held beyond 60 days subject to storage fee(s)								Rece	eived I	For Lat	By:	1 Ita	Date	Time 1531
Copies: White-Original Yellow-Project File Pink-Cu	stomer Con								10	<u> </u>	<u>~ "</u>	MINN.	11/13/09	ハンン



11711 SE Capps Road Clackamas, OR 97015 (503) 607-1331 Fax (503) 607-1336

November 13, 2009

Neil Maunu Kinder Morgan Bulk Terminal #5 15550 N. Lombard Portland, OR 97203

TEL: (503) 285-4500 FAX: (503) 285-7733

RE: Zn Source Area

Dear Neil Maunu:

Order No.: 0911035

Specialty Analytical received 1 sample on 11/6/2009 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Project Manager

Technical Review

Date: 13-Nov-09

CLIENT:

Kinder Morgan Bulk Terminal #5

Project:

Zn Source Area

Lab Order:

0911035

Lab ID:

0911035-01

Collection Date: 11/6/2009 11:40:00 AM

Client Sample ID: Zn Source Area

Matrix: STORM WATER

Analyses

Result

DF

Date Analyzed

ICP METALS

Limit Qual Units

0.0100

Zinc

E200.7 0.373

mg/L

1

Analyst: zau 11/11/2009 3:26:11 PM

Date: 13-Nov-09

CLIENT:

Kinder Morgan Bulk Terminal #5

Work Order:

0911035

Project:

Zn Source Area

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID:	MBLK-24378	SampType:	MBLK	TestCod	le: 200.7	Units: mg/L		Prep Date	e: 11/11/2	009	Run ID: TJA	A IRIS_09111	1C
Client ID:	ZZZZZ	Batch ID:	24378	TestN	lo: E200.7			Analysis Date	e: 11/11/2	009	SeqNo: 639	301	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			ND	0.0100									
Sample ID:	LCS-24378	SampType:	LCS	TestCod	le: 200 .7	Units: mg/L		Prep Date	e: 11/11/2	009	Run ID: TJA	A IRIS_09111	1C
Client ID:	ZZZZZ	Batch ID:	24378	TestN	lo: E200.7			Analysis Date	e: 11/11/2	009	SeqNo: 639	302	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			0.5044	0.0100	0.5	0	101	92.3	111	0	0		
Sample ID:	0911045-02CMS	SampType:	MS	TestCod	le: 200.7	Units: mg/L		Prep Date	e: 11/11/2	1009	Run ID: TJA	A IRIS_09111	11C
Client ID:	ZZZZZ	Batch ID:	24378	TestN	lo: E200.7			Analysis Date	e: 11/11/2	2009	SeqNo: 639	306	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			0.5322	0.0100	0.5	0.0674	93	93	110	0	0		S,RP
Sample ID:	0911045-02CMSD	SampType:	MSD	TestCoo	ie: 200.7	Units: mg/L		Prep Date	e: 11/11/2	2009	Run ID: TJA	A IRIS_09111	11C
Client ID:	ZZZZZ	Batch ID:	24378	TestN	lo: E200.7			Analysis Date	e: 11/11/2	2009	SeqNo: 639	307	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			0.5592	0.0100	0.5	0.0674	98.4	93	110	0.5322	4.95	20	
Sample ID:	0911045-02CDUP	SampType:	DUP	TestCoo	le: 200.7	Units: mg/L	<u> </u>	Prep Dat	e: 11/11/2	2009	Run ID: TJ/	A IRIS_09111	11C
Client ID:	ZZZZZ	Batch ID:	24378	TestN	lo: E200.7			Analysis Date	e: 11/11/2	2009	SeqNo: 639	304	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	Hight imit	RPD Ref Val	%RPD	RPDLimit	Qual
							701120	LOWEITH	- 11911211111		70.11.0		

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Page 1 of 2

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

Kinder Morgan Bulk Terminal #5

Work Order:

0911035

Project:

Zn Source Area

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

CCV	SampType:	ccv	TestCod	de: 200.7	Units: mg/L		Prep Da	te:		Run ID: TJA	A IRIS_09111	I1C
ZZZZZ	Batch ID:	24378	TestN	lo: E200.7		Analysis Date: 11/11			1/11/2009 SeqNo: 6		300	
		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
		0.4916	0.0100	0.5	0	98.3	90	110	0	0		
ccv	SampType:	CCV	TestCoo	de: 200.7	Units: mg/L	** *	Prep Da	te:		Run ID: TJA	A IRIS_09111	I1C
ZZZZZ	Batch ID:	24378	TestN	lo: E200.7			Analysis Dat	te: 11/11/2	2009	SeqNo: 639	305	
		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
		0.4904	0.0100	0.5	0	98.1	90	110	0	0		
ccv	SampType:	ccv	TestCod	de: 200.7	Units: mg/L		Prep Da	te:		Run ID: TJA	A IRIS_0911	11C
ZZZZZ	Batch ID:	24378	TestN	lo: E200.7			Analysis Dat	te: 11/11/2	2009	SeqNo: 639	316	
		Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
		0.4897	0.0100	0.5	0	97.9	90	110	0	0		
ccv	SampType:			0.5 de: 200.7	0 Units: mg/L	97.9	90 Prep Da		0	0 Run ID: TJ	A IRIS_0911	110
ccv zzzzz	SampType: Batch ID:	ccv	TestCoo					te:			_	11C
		ccv	TestCoo	de: 200.7	Units: mg/L		Prep Da	te: 11/11/2		Run ID: TJ	_	11C Qual
		CCV R58329	TestCoo TestN	de: 200.7 No: E200.7	Units: mg/L		Prep Da Analysis Da	te: 11/11/2	2009	Run ID: TJA SeqNo: 639	326	
		CCV R58329 Result	TestCoo TestN PQL	de: 200.7 No: E200.7 SPK value	Units: mg/L SPK Ref Val	%REC	Prep Da Analysis Da LowLimit	te: te: 11/11/2 HighLimit	2009 RPD Ref Val	Run ID: TJA SeqNo: 639 %RPD	326	
		CCV R58329 Result 0.2519	TestCod TestN PQL 0.00500	de: 200.7 No: E200.7 SPK value	Units: mg/L SPK Ref Val	%REC	Prep Da Analysis Da LowLimit 90	te: te: 11/11/2 HighLimit	2009 RPD Ref Val 0	Run ID: TJA SeqNo: 639 %RPD	326	
		CCV R58329 Result 0.2519 0.4678	TestCod TestN PQL 0.00500 0.0100	de: 200.7 No: E200.7 SPK value	Units: mg/L SPK Ref Val 0 0	%REC 101 93.6	Prep Da Analysis Da LowLimit 90 90	te: te: 11/11/2 HighLimit 110	2009 RPD Ref Val 0 0	Run ID: TJA SeqNo: 639 %RPD 0	326	
		Result 0.2519 0.4678 0.999 0.4893	TestCod TestN PQL 0.00500 0.0100 0.0200 0.0100	de: 200.7 No: E200.7 SPK value 0.25 0.5	Units: mg/L SPK Ref Val 0 0 0	%REC 101 93.6 99.9	Prep Da Analysis Da LowLimit 90 90	te: 11/11/2 HighLimit 110 110 110 110 110	2009 RPD Ref Val 0 0 0	Run ID: TJA SeqNo: 639 %RPD 0 0	RPDLimit	Qual
ZZZZZ	Batch ID:	Result 0.2519 0.4678 0.999 0.4893	TestCoo TestN PQL 0.00500 0.0100 0.0200 0.0100 TestCoo	de: 200.7 No: E200.7 SPK value 0.25 0.5 1 0.5	Units: mg/L SPK Ref Val 0 0 0 0	%REC 101 93.6 99.9 97.9	Prep Da Analysis Dar LowLimit 90 90 90 90	te: te: 11/11/2 HighLimit 110 110 110 110	RPD Ref Val 0 0 0 0	Run ID: TJJ/ SeqNo: 639 %RPD 0 0 0	RPDLimit A IRIS_0911	Qual
ZZZZZ	Batch ID:	Result 0.2519 0.4678 0.999 0.4893	TestCoo TestN PQL 0.00500 0.0100 0.0200 0.0100 TestCoo	de: 200.7 No: E200.7 SPK value 0.25 0.5 1 0.5 de: 200.7	Units: mg/L SPK Ref Val 0 0 0 0	%REC 101 93.6 99.9 97.9	Prep Da Analysis Da LowLimit 90 90 90 90 Prep Da	te: te: 11/11/2 HighLimit 110 110 110 110 tte:	RPD Ref Val 0 0 0 0	Run ID: TJ/ SeqNo: 639 %RPD 0 0 0 0	RPDLimit A IRIS_0911	Qual
	CCV	CCV SampType: Batch ID: CCV SampType: CCV SampType:	Result 0.4916 CCV SampType: CCV CCV SampType: CCV CC	Result	ZZZZZZ Batch ID: 24378 TestNo: E200.7 Result PQL SPK value 0.4916 0.0100 0.5 CCV SampType: CCV TestCode: 200.7 ZZZZZZ Batch ID: 24378 TestNo: E200.7 Result PQL SPK value 0.4904 0.0100 0.5 CCV SampType: CCV TestCode: 200.7 ZZZZZZ Batch ID: 24378 TestNo: E200.7	ZZZZZZ Batch ID: 24378 TestNo: E200.7 Result PQL SPK value SPK Ref Val 0.4916 0.0100 0.5 0 CCV SampType: CCV TestCode: 200.7 Units: mg/L ZZZZZZ Batch ID: 24378 TestNo: E200.7 E200.7 CCV SampType: CCV TestCode: 200.7 Units: mg/L ZZZZZZ Batch ID: 24378 TestNo: E200.7 Units: mg/L	ZZZZZZ Batch ID: 24378 TestNo: E200.7 Result PQL SPK value SPK Ref Val %REC 0.4916 0.0100 0.5 0 98.3 CCV SampType: CCV TestCode: 200.7 Units: mg/L ZZZZZZ Batch ID: 24378 TestNo: E200.7 Write: %REC 0.4904 0.0100 0.5 0 98.1 CCV SampType: CCV TestCode: 200.7 Units: mg/L ZZZZZZ Batch ID: 24378 TestNo: E200.7	ZZZZZZ Batch ID: 24378 TestNo: E200.7 Analysis Da Result PQL SPK value SPK Ref Val %REC LowLimit 0.4916 0.0100 0.5 0 98.3 90 CCV SampType: CCV TestCode: 200.7 Units: mg/L Prep Da ZZZZZZ Batch ID: 24378 TestNo: E200.7 Analysis Da CCV SampType: CCV TestCode: 200.7 Units: mg/L Prep Da CCV SampType: CCV TestCode: 200.7 Units: mg/L Prep Da ZZZZZZ Batch ID: 24378 TestNo: E200.7 Analysis Da	ZZZZZZ Batch ID: 24378 TestNo: E200.7 Analysis Date: 11/11/2 Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit 0.4916 0.0100 0.5 0 98.3 90 110 CCV SampType: CCV TestCode: 200.7 Units: mg/L Prep Date: ZZZZZZ Batch ID: 24378 TestNo: E200.7 Analysis Date: 11/11/2 CCV SampType: CCV TestCode: 200.7 Units: mg/L Prep Date: ZZZZZZ Batch ID: 24378 TestNo: E200.7 Analysis Date: 11/11/2	Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val	Result PQL SPK value SPK Ref Val WREC LowLimit HighLimit RPD Ref Val WRPD	ZZZZZZ Batch ID: 24378 TestNo: E200.7 Analysis Date: 11/11/2009 SeqNo: 639300 Result PQL SPK value SPK Ref Val %REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit CCV SampType: CCV TestCode: 200.7 Units: mg/L Prep Date: Run ID: TJA IRIS_09117 ZZZZZZ Batch ID: 24378 TestNo: E200.7 Units: mg/L Prep Date: Run ID: TJA IRIS_09117 CCV SampType: CCV TestCode: 200.7 Units: mg/L Prep Date: Run ID: TJA IRIS_09117 ZZZZZ Batch ID: 24378 TestNo: E200.7 Units: mg/L Prep Date: Run ID: TJA IRIS_09117 ZZZZZ Batch ID: 24378 TestNo: E200.7 Units: mg/L Prep Date: Run ID: TJA IRIS_09117 ZZZZZ Batch ID: 24378 TestNo: E200.7 Units:

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

R - RPD outside accepted recovery limits

Page 2 of 2

J - Analyte detected below quantitation limits

KEY TO FLAGS

- A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards.
- A1 This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
- A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- B The blank exhibited a positive result greater than the reporting limit for this compound.
- CN See Case Narrative.
- D Result is based from a dilution.
- E Result exceeds the calibration range for this compound. The result should be considered as estimate.
- F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- H Sample was analyzed outside recommended hold time.
- HT At clients request, sample was analyzed outside recommended hold time.
- J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
- K Diesel result is biased high due to amount of Oil contained in the sample.
- L Diesel result is biased high due to amount of Gasoline contained in the sample.
- M Oil result is biased high due to amount of Diesel contained in the sample.
- N Gasoline result is biased high due to amount of Diesel contained in the sample.
- MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
- MI Result is outside control limits due to matrix interference.
- MSA Value determined by Method of Standard Addition.
- O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
- P Detection levels of Methylene Chloride may be laboratory contamination, due to previous analysis or background levels.
- Q Detection levels elevated due to sample matrix.
- R RPD control limits were exceeded.
- RF Duplicate failed due to result being at or near the method-reporting limit.
- RP Matrix spike values exceed established QC limits, post digestion spike is in control.
- S Recovery is outside control limits.
- SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
- * The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

Rev Dec 15, 2004

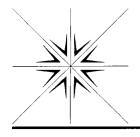
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Specialty Analytical

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11711 SE Capps Road Clackamas, OR 97015 (503) 607-1331 Fax (503) 607-1336

October 30, 2009

Neil Maunu Kinder Morgan Bulk Terminal #5 15550 N. Lombard Portland, OR 97203

TEL: (503) 285-4500 FAX: (503) 285-7733

RE: SW-Zn Impact Area

Dear Neil Maunu:

Order No.: 0910176

Specialty Analytical received 1 sample on 10/26/2009 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Project Manager

Technical Review

Date: 30-Oct-09

CLIENT:

Kinder Morgan Bulk Terminal #5

Project:

SW-Zn Impact Area

Lab Order:

0910176

Lab ID:

0910176-01

Collection Date: 10/23/2009 11:27:00 AM

Client Sample ID: SW-Zn Area

Matrix: STORM WATER

Analyses

Limit Qual Units

DF

Date Analyzed

ICP METALS

Result

1.10

E200.7

0.0100

mg/L

Analyst: zau 10/29/2009 11:05:16 AM

Page 1 of 1

Date: 30-Oct-09

CLIENT:

Kinder Morgan Bulk Terminal #5

Work Order:

0910176

Project:

SW-Zn Impact Area

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

0	NATURE 0.4000												
Sample ID:	MBLK-24269	SampType:	MBLK	TestCod	e: 200.7	Units: mg/L		Prep Date	e: 10/28/2	009	Run ID: TJ/	A IRIS_09102	:9A
Client ID:	ZZZZZ	Batch ID:	24269	TestN	o: E200.7			Analysis Date	: 10/29/2	009	SeqNo: 636	027	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			ND	0.0100					.,,				
Sample ID:	LCS-24269	SampType:	LCS	TestCod	e: 200. 7	Units: mg/L		Prep Date	e: 10/28/2	009	Run ID: TJ/	A IRIS_09102	9A
Client ID:	ZZZZZ	Batch ID:	24269	TestN	o: E200.7			Analysis Date	10/29/2	009	SeqNo: 636	028	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			0.4933	0.0100	0.5	0	98.7	92.3	111	0	0		
Sample ID:	0910199-02BMS	SampType:	MS	TestCod	e: 200.7	Units: mg/L		Prep Date	e: 10/28/2	009	Run ID: TJ/	A IRIS_09102	.9A
Client ID:	ZZZZZ	Batch ID:	24269	TestN	io: E200.7			Analysis Date	e: 10/29/2	009	SeqNo: 636	6032	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			0.5114	0.0100	0.5	0.0156	99.2	93	110	0	0		
Sample ID:	0910199-02BMSD	SampType:	MSD	TestCod	e: 200.7	Units: mg/L		Prep Date	e: 10/28/2	009	Run ID: TJ/	 A IRIS_09102	.9A
Client ID:	ZZZZZ	Batch ID:	24269	TestN	lo: E200.7			Analysis Date	e: 10/29/2	009	SeqNo: 636	6033	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			0.5167	0.0100	0.5	0.0156	100	93	110	0.5114	1.03	20	
Sample ID:	0910199-02BDUP	SampType:	DUP	TestCod	e: 200.7	Units: mg/L	·····	Prep Date	e: 10/28/2	009	Run ID: TJ	A IRIS_09102	.9A
Client ID:	ZZZZZ	Batch ID:	24269	TestN	lo: E200.7			Analysis Date	e: 10/29/2	009	SeqNo: 636	6031	
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Zinc			0.0156	0.0100	0	0	0	0	0	0.0156	0	20	

Qualifiers:

ND - Not Detected at the Reporting Limit

S - Spike Recovery outside accepted recovery limits

B - Analyte detected in the associated Method Blank

J - Analyte detected below quantitation limits

R - RPD outside accepted recovery limits

Page 1 of 2

Kinder Morgan Bulk Terminal #5

Work Order:

0910176

Project:

SW-Zn Impact Area

ANALYTICAL QC SUMMARY REPORT

TestCode: 200.7

Sample ID:	ccv	SampType:	ccv	TestCod	e: 200. 7	Units: mg/L		Prep Date	e:		Run ID: TJA IRIS_091029A		
Client ID:	ZZZZZ	Batch ID:	24269	TestN	o: E200.7			Analysis Date	e: 10/29/2	009	SeqNo: 636030		
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit	Qual	
Zinc			0.5028	0.0100	0.5	0	101	90	110	0	0		
Sample ID:	ccv	SampType:	CCV	TestCoo	e: 200.7	Units: mg/L		Prep Date) :		Run ID: TJA IRIS_091	029A	
Client ID:	ZZZZZ	Batch ID:	24269	TestN	lo: E200.7			Analysis Date	e: 10/29/2	009	SeqNo: 636041		
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit	Qual	
Zinc			0.5007	0.0100	0.5	0	100	90	110	0	0		
Sample ID:	ccv	SampType:	ccv	TestCoo	e: 200.7	Units: mg/L		Prep Date	∋ :		Run ID: TJA IRIS_091	029A	
Client ID:	ZZZZZ	Batch ID:	24269	TestN	lo: E200.7			Analysis Date	e: 10/29/2	2009	SeqNo: 636052		
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit	Qual	
Zinc			0.4949	0.0100	0.5	0	99	90	110	0	0		
Sample ID:	ccv	SampType:	ccv	TestCod	le: 200.7	Units: mg/L		Prep Date	e:	· . <u>.</u>	Run ID: TJA IRIS_091	029A	
Client ID:	ZZZZZ	Batch ID:	24269	TestN	lo: E200.7		•	Analysis Date	e: 10/29/2	2009	SeqNo: 636056		
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit	Qual	
Zinc			0.5001	0.0100	0.5	0	100	90	110	0	0		
Sample ID:	ICV	SampType:	ICV	TestCoo	le: 200.7	Units: mg/L		Prep Date	e:		Run ID: TJA IRIS_091	029A	
Client ID:	ZZZZZ	Batch ID:	24269	TestN	lo: E200.7			Analysis Date	e: 10/29/2	2009	SeqNo: 636026		
Analyte			Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit	Qual	
Zinc			0.5059	0.0100	0.5	0	101	95	105	0	0		

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

Page 2 of 2

KEY TO FLAGS

- A This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards.
- A! This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2 This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against a lube oil calibration standard.
- A3 The result was determined to be Non-Detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- B The blank exhibited a positive result greater than the reporting limit for this compound.
- CN See Case Narrative.
- D Result is based from a dilution.
- E Result exceeds the calibration range for this compound. The result should be considered as estimate.
- F The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- H Sample was analyzed outside recommended hold time.
- HT At clients request, sample was analyzed outside recommended hold time.
- J The result for this analyte is between the MDL and the PQL and should be considered as estimated concentration.
- K Diesel result is biased high due to amount of Oil contained in the sample.
- L Diesel result is biased high due to amount of Gasoline contained in the sample.
- M Oil result is biased high due to amount of Diesel contained in the sample.
- N Gasoline result is biased high due to amount of Diesel contained in the sample.
- MC Sample concentration is greater than 4x the spiked value, the spiked value is considered insignificant.
- MI Result is outside control limits due to matrix interference.
- MSA Value determined by Method of Standard Addition.
- O Laboratory Control Standard (LCS) exceeded laboratory control limits, but meets CCV criteria. Data meets EPA requirements.
- P Detection levels of Methylene Chloride may be laboratory contamination, due to previous analysis or background levels.
- Q Detection levels elevated due to sample matrix.
- R RPD control limits were exceeded.
- RF Duplicate failed due to result being at or near the method-reporting limit.
- RP Matrix spike values exceed established QC limits, post digestion spike is in control.
- S Recovery is outside control limits.
- SC Closing CCV or LCS exceeded high recovery control limits, but associated samples are non-detect. Data meets EPA requirements.
- * The result for this parameter was greater that the maximum contaminant level of the TCLP regulatory limit.

Rev Dec 15, 2004

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Collected By: Signature Printed	Specialty Analytical 11711 SE Capps Road Clackamas, OR 97015 Phone: 503-607-1331 Fax: 503-607-1336	·				Addre Addre Phor Proje	pany_ ess Pow ne_S ect No	15 21 03	ud SS 28	Ser O 1 d - 5- OR_	- () () 420	1010 0 10 0 P wa_	el Mauni gan PDX T-5 OM have Term S- 2 97203 Fax S713 285-7733 roject Name Sw- En Impact Upea OtherP.O. No
Signature	~			Γ	<u> </u>		Anal	yses	 T			For Laboratory Use	
Turn Around Time A Normal 5-7 Business Days C Rush			No. of Containers	70									Shipped Via
Date Tim	Sample I.D. 127 SW - ZN AVCA	Matrix	,	, ~	<u> </u>						ļ	_	Comments Lab I.D.
	T SW EN PHICA	SW											
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Relinquished By:

Received For Lab By:

Company:

Copies: White-Original

Relinquished By://

Company:

Yellow-Project File

Unless Reclaimed, Samples Will Be Disposed of 60 Days After Receipt.

Samples held beyond 60 days subject to storage fee(s)

Date

Pink-Customer Copy

Received By:

Company:

Time

Date

Date

Time

Time



Kinder Morgan Terminals

July 13, 2009

Mr. Dennis Jurries, PE DEQ NWR Storm Water Engineer 2020 SW Fourth Avenue, Suite 400 Portland, OR 97201-4987

Re: Annual Stormwater Report for 2009

Ref: Permit #101377

Dear Mr. Jurries:

Enclosed is Portland Bulk Terminal Five's annual Stormwater Report for the year ending June 30, 2009. Please note that the "Suspended Solids Totals" results are not available for the sample date of 02/10/09 due to a lab error. Historically, sample results for suspended solids have been significantly below the permit benchmark limits therefore, we have reason to believe there was not an exceedance for the 2/10/09 sample. Measures have been taken to ensure these kinds of errors are prevented in the future.

If there are questions, please do not hesitate to call me at the number listed below.

Sincerely yours,

KINDER MORGAN BULK TERMINALS

Jack Waller

Manager, Terminal 5

Cc:

Regional EHS Manager

File



Kinder Morgan Terminals

July 13, 2009

Mr. Timothy P. Dean City of Portland - Environmental Services Water Pollution Control Laboratory Industrial Stormwater Program 6543 N. Burlington Avenue Portland, OR 97203-5452

Re: Annual Stormwater Report for 2009

Ref: Permit #101377

Dear Mr. Dean:

Enclosed is Portland Bulk Terminal Five's annual Stormwater Report for the year ending June 30, 2009. Please note that the "Suspended Solids Totals" results are not available for the sample date of 02/10/09 due to a lab error. Historically, sample results for suspended solids have been significantly below the permit benchmark limits therefore, we have reason to believe there was not an exceedance for the 2/10/09 sample. Measures have been taken to ensure these kinds of errors are prevented in the future.

Please note that there are daily visual monitoring documents available on site.

If there are questions, please do not hesitate to call me at the number listed below. Sincerely yours,

KINDER MORGAN BULK TERMINALS

Jack Waller

Manager, Terminal 5

CC:

Regional EHS Manager

File

Parmittan Logal Nam			Stormwa	וופו הופנו					<u>rermit</u>	
Permittee Legal Nan		Kinder Morgan				e No./Facili	ty ID:	70613		
Facility Common Na	me:	Portland Bulk Tem	ninals ————————		Reporting		July 1,	2008	to June 30, ²⁰⁰⁹	
Facility Location:		15550 North Lomb	ard, Portland, OR 97	7203 	Laborator	y Name:		TestAmerica		
County:		Moultnomah			Laborator	y ORELAP	#: '	OR100021	DEC	
Monitor for the following more than 4 sampling poi	pollutants at sam ints). <u>You MUST</u>	pling point(s) s _i also attach a co	pecified in your	SWPCP. Add r	more sheets i s) and associ	f necessary (e. ated QA/QC in	g., if more than formation to thi	4 samples are	State of Oreg collected per pollutant or facility has Environment Quality	
Name or Number of Sampling Point(s) (group	Sample Date	pH **	Suspended Solids, Total **	Oil and Grease, Total ** mg/L	Copper, Total	Lead, Total	Zinc, Total	E. coli *	* Only applies to landfills accepting septage/biosolids and sewage treatment plants.	
data per sampling point)		s.u.	mg/L .		mg/L	mg/L	mg/L	counts/100 ml	** Effluent limits for these parameters apply to some industries	
Outfall 001	11/10/2008	6.42	32.7		0.00399	0.0011	0.621		see permit, Schedule A.7.	
Outfall 001	12/12/008	6.48	64	ND	0.0188	0.0057	1.02	2	Note 1: Submit this report to the appropriate DEQ regional or agent offices (see below) annually by July 31st. The report	
Outfall 001	2/10/2009	6.86	*See Cover Letter	ND	ND ND	ND	0.209	9	must contain the results of all stormwater monitoring conducted during the year. If you have a monitoring waiver for	
Outfall 001	3/14/2009	7.19	20		0.0072	0.00135	0.261	1	one or more of the pollutant(s), please report "M" in the column(s)-see permit-Schedule B.3.	
Geometric Mean	(Note 4)	6:730	34:720		0.008	0.002	0.431		Note 2: Non-detects must be reported as "ND" along with the applicable method detection limit in parentheses - e.g. ND (0.001). Note 3: If a stormwater sampling result exceeds any of the	
Geometric Mean	(Note 4)								benchmark values, the permit registrant must, within 30 calendar days of receiving the sampling results, investigate the cause of the benchmark exceedance(s), review the SWPCF and submit an Action Plan for department or agent approval. Note 4: For the 4th year of coverage under the permit that became effective on July 1, 2007, report the geometric mean value of the last 4 samples collected for each pollutant parameter, from each sampling point. The geometric mean value is automatically calculated if using the Excel version of	
Geometric Mean	(Note 4)								the DMR form.	
Geometric Mean		5.5 - 9.0	130	28 (10)			0.6	有数据的	Signature of the state of the s	
			Na	me/Title Princip	al Executive C	officer or Author	ized Delegate			
(Please Print)	wall	2							···	
Telephone: 503-285-4200 I certify, under penalty of lav submitted. Based on my inc accurate, and complete. I a	quiry of the person c	r persons who ma	nts were prepared nage the system.	or those persons	supervision in a	sible for gatherin	a the information	the information	qualified personnel properly gather and evaluate the information submitted is, to the best of my knowledge and belief, true, violations.	
Sign here:	Meh				- al al'at'			Date 7	BUS	

See reverse side for additional visual monitoring requirements

		Monthly Visual Obse	rvations									
	Record V	isual Observations for Oil and.	Grease Sheen and Floatin	ig Solids:								
	ase Sheen - No visible sheen allowed : Monthly observations when no discharges occur, please write in ::No Discharge		g Solids (associated with industrial lischarging For months when no d		allowed. Monthly observation when							
Date					ating and an interest of the state of the st							
July No Discharge												
August No Discharge												
September , No Discharge												
October No Discharge												
November 1 11/10/2008	No visible sheen or solids in the water at the sump to the sam	pling manhole. Outfall 001 is underwater.										
December 12/12/2008	No visible sheen or solids in the water at the sump to the sam	pling manhole. Outfall 001 is underwater.										
January 1/2/2009	nuary 1/2/2009 No visible sheen or solids in the water at the sump to the sampling manhole. Outfall 001 is underwater.											
February 2/24/2009	No visible sheen or solids in the water at the sump to the sam	pling manhole. Outfall 001 is underwater.										
March 2 3/28/2009	No visible sheen or solids in the water at the sump to the sam	pling manhole. Outfall 001 is underwater.										
April 4/28/2009	No visible sheen or solids in the water at the sump to the sam	pling manhole. Outfall 001 is underwater.										
May , 5/5/2009	No visible sheen or solids in the water at the sump to the sam	pling manhole. Outfall 001 is underwater.	·									
June 6/19/2009	No visible sheen or solids in the water at the sump to the sam	pling manhole. Outfall 001 is underwater.										
	rithin the following local jurisdictions, please of this report and laboratory results sheet(s)	For all other locations, please	submit one (1) copy of this on to the appropriate DEQ i									
1	itation to the local jursisdiction annually by	dodamonan	on to the appropriate sea i	ogional office annually by	outy o tot.							
Clean Water Services Industrial Stormwater	July 31st: City of Portland City of Eugene Industrial Stormwater Section Industrial Source Control Water Pollution Control Lab 410 River Ave.	Northwest	DEQ Northwest Region Office 2020 SW 4th Ave. Suite 400 Portland, OR 97201 Phone: (503) 229-5263 Hours: 8 am - 5 pm	DEQ Eastern Region Office 300 SE Reed Market Rd. Bend, OR 97702-2237 Phone: (541) 388-6146 Hours: 8 am - 5 pm								
Hillsboro, OR 97123	6543 N Burlington Ave. Eugene, OR 97404 Portland, OR 97203-5452	Western Eastern	DEQ Western Region Office (Benton, Lincoln, Marion, Polk, and Yamhill counties) 750 Front St NE, #120 Salem, OR 97301-1039 Phone: (503) 378-8240 Hours: Mon - Thurs: 8 am - 5 pm Fri: 8 am - noon, 1 - 5 pm	DEQ Western Region Office (Lane and Linn counties) 1102 Lincoln St. Suite 210 Eugene, OR 97401 Phone: (541) 686-7838 Hours: 8 am - 5 pm	DEQ Western Region Office (Coos, Curry, Douglas, Jackson, and Josephine counties) 221 Stewart Ave. Suite 201 Medford, OR 97501 Phone: (541) 776-6010 Hours: 8 am – noon, 1 - 5 pm							



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

ORELAP#: OR100021

March 30, 2009

Katrina Greene Kinder Morgan Bulk Terminals: T5-Portland 15550 N. Lombard Terminal 5 Portland, OR 97203

RE: Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 03/16/09 10:45. The following list is a summary of the Work Orders contained in this report, generated on 03/30/09 15:14.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	<u>ProjectNumber</u>
PSC0443	Stormwater	NA

TestAmerica Portland

hull W. Amil

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Darrell Auvil For Brian Cone, Industrial Services Manager



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

THE LEADER IN ENVIRONMENTAL TESTING

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: Project Manager: NA

Katrina Greene

Report Created: 03/30/09 15:14

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Outfall 001	PSC0443-01	Water	03/14/09 17:15	03/16/09 10:45
Culvert	PSC0443-02	Water	03/14/09 17:10	03/16/09 10:45

TestAmerica Portland

and W. Amil

Darrell Auvil For Brian Cone, Industrial Services Manager



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132

BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

15550 N. Lombard Terminal 5 Portland, OR 97203 Project Number: NA
Project Manager: Katı

Katrina Greene

Report Created: 03/30/09 15:14

Oil and Grease Analysis per EPA Method 1664

TestAmerica Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-01	(Outfall 001)			Wa	ter		Sam	pled: 03/14/	09 17:15		
Oil & Grease		EPA 1664	ND		4.76	mg/l	1x	9030895	03/27/09 15:00	03/30/09 07:55	

TestAmerica Portland

hall W. Amil

Darrell Auvil For Brian Cone, Industrial Services Manager



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132

ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number:
Project Manager:

Katrina Greene

Report Created: 03/30/09 15:14

Total Metals per EPA 200 Series Methods

TestAmerica Portland

											<u>_</u>
Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-01	(Outfall 001)			W	ater		Sam	pled: 03/14/	09 17:15		
Copper		EPA 200.8	0.00720		0.00200	mg/l	1x	9030564	03/18/09 11:28	03/21/09 05:46	
Lead		*	0.00135		0.00100	**	н	**	"	**	
Zinc			0.261		0.00500	n	"	"	H	u	
PSC0443-02	(Culvert)			W	'ater		Sam	pled: 03/14/	09 17:10		
Copper		EPA 200.8	0.0103		0.00200	mg/l	lx	9030564	03/18/09 11:28	03/21/09 06:00	
Lead		n	0.00195		0.00100	**	*		"	m	
Zinc		**	0.295		0.00500	**		**	**	*	
	•										

TestAmerica Portland

Chill W. Amil

Darrell Auvil For Brian Cone, Industrial Services Manager



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132

ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

15550 N. Lombard Terminal 5 Portland, OR 97203 Project Number: NA
Project Manager: Kati

Katrina Greene

Report Created: 03/30/09 15:14

Dissolved Metals per EPA 200 Series Methods

TestAmerica Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-02	(Culvert)			W	ater		Sam	pled: 03/14/	09 17:10		
Copper		EPA 200.8	0.00535	****	0.00200	mg/l	lx	9030756	03/24/09 11:38	03/25/09 22:24	
Lead		**	ND		0.00100	**	"	"	**		
Zinc		**	0.107		0.00500	*	**	н	n	Ħ	

TestAmerica Portland

and w. Anil

Darrell Auvil For Brian Cone, Industrial Services Manager



PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

THE LEADER IN ENVIRONMENTAL TESTING

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

15550 N. Lombard Terminal 5 Portland, OR 97203

Project Number: Project Manager: NA Katrina Greene

Report Created: 03/30/09 15:14

Conventional Chemistry Parameters per Standard Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-01 (Outfall 001)			Wa	iter		Sam	pled: 03/14/	09 17:15		
Total Suspended Solids	SM 2540D	20.0		10.0	mg/l	lx	9030578	03/18/09 14:00	03/18/09 17:34	

TestAmerica Portland

el W. Amil

Darrell Auvil For Brian Cone, Industrial Services Manager



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

THE LEADER IN ENVIRONMENTAL TESTING

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: Project Manager: NA

Katrina Greene

Report Created: 03/30/09 15:14

Field Testing of Conventional Chemistry Parameters per APHA/EPA Methods

TestAmerica Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-01	(Outfall 001)			Wa	ter		Sam	pled: 03/14/	09 17:15		
рН		EPA 150.1	7.19			pH Units	1x	9030675	03/14/09 17:20	03/14/09 17:25	

TestAmerica Portland

Onell W. Anil

Darrell Auvil For Brian Cone, Industrial Services Manager



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Project Manager:

Stormwater

Project Number:

Katrina Greene

NA

Report Created:

03/30/09 15:14

Lab Filtration

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-02 (Culvert)			Wa	iter		Sam	pled: 03/14/	09 17:10		
Lab Filtration	NCA SOP	ND		1.00	N/A	1x	9030482	03/16/09 17:41	03/16/09 18:31	

TestAmerica Portland

and w. Anil

Darrell Auvil For Brian Cone, Industrial Services Manager



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland Stormwater Project Name:

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Number:

NA

Project Manager:

Katrina Greene

Report Created: 03/30/09 15:14

	Oil and Gr	ease Analysi	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Method estAmeric	1.5		tory Qua	ality Contro	l Results				
QC Batch: 9030895	Water F	reparation M	lethod: O	&G prep	CE				-	****	1200	<u> </u>	¥.
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike % Amt REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030895-BLK1)								Extracted:	03/27/09 14	:15			
Oil & Grease	EPA 1664	ND		5.00	mg/l	lx						03/30/09 07:55	
LCS (9030895-BS1)								Extracted:	03/27/09 14	:15			
Oil & Grease	EPA 1664	35.9			mg/l	1x		40.1 89.5%	(78-114)			03/30/09 07:55	
Matrix Spike (9030895-MS1)				QC Source:	PSC0439-0)1		Extracted:	03/27/09 14	:15			
Oil & Grease	EPA 1664	25.4			mg/l	1x	0.385	40.1 62,4%	(78-114)			03/30/09 07:55	М8
Matrix Spike Dup (9030895-MS	D1)			QC Source:	PSC0439-0)1		Extracted:	03/27/09 14	:15			
Oil & Grease	EPA 1664	29.2			mg/l	lx	0.385	40.1 71.9%	(78-114)	13.9%	(18)	03/30/09 07:55	M8

TestAmerica Portland

Darrell Auvil For Brian Cone, Industrial Services Manager



Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Stormwater Project Name:

Project Number:

Project Manager: Katrina Greene

NA

Report Created: 03/30/09 15:14

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

			1	estAmerica	a Portland							100		1
QC Batch: 9030564	Water P	reparation Me	thod: E	PA 200/30	05									
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030564-BLK1)								Extr	acted:	03/18/09 11	:28			
Copper	EPA 200.8	ND		0.00200	mg/l	1x							03/21/09 03:50	
Lead	н	ND		0.00100	*	*							*	
Zinc	19	ND		0.00500	"	n							п .	
LCS (9030564-BS1)						_		Extr	acted:	03/18/09 11	:28			
Соррег	EPA 200.8	0.0968		0.00200	mg/l	lx		0.100	96.8%	(85-115)			03/21/09 03:58	
Lead	**	0.0906		0.00100	**		••		90.6%	н			Ħ	
Zinc	н	0.0866		0.00500	n	н		*	86.6%	•			н	
Duplicate (9030564-DUP1)				QC Source:	PSC0426-0	01		Extr	acted:	03/18/09 11	:28			
Copper	EPA 200.8	1.35		0.0100	mg/l	5x	1.43				5.48%	(20)	03/21/09 04:41	
Lead	11	ND		0.00500		n	ND				11.4%		*	
Zinc	11	0.0516		0.0250	**	"	0.0564				8.70%	#	"	
Matrix Spike (9030564-MS1)				QC Source:	PSC0426-0	1		Extr	acted:	03/18/0 <u>9</u> 11	:28			
Copper	EPA 200.8	1.51		0.0100	mg/l	5x	1.43	0.100	83.5%	(75-125)			03/21/09 04:48	_
Lead	•	0.0922		0.00500	H	н	0.00370	•	88.6%	"		'	**	
Zinc	**	0.148		0.0250	"	"	0.0564	*	91.8%	(70-130)			н	
Matrix Spike (9030564-MS2)				QC Source:	PSC0443-0	11		Extr	acted:	03/18/09 11	:28	=1		
Соррег	EPA 200.8	0.0958		0.00200	mg/l	1x	0.00720	0.100	88.6%	(75-125)			03/21/09 05:53	
Lead	н	0.0835		0.00100	"		0.00135	"	82.1%				n	
Zinc	,	0.338		0.00500	н	*	0.261	н	76.9%	(70-130)			_	

TestAmerica Portland

el W. Amil



PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

15550 N. Lombard Terminal 5 Portland, OR 97203

Project Number: Project Manager:

Katrina Greene

NA

Report Created: 03/30/09 15:14

Dissolved Metals per EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

2				estAmerica	romano									<u> </u>
QC Batch: 9030756	Water P	reparation Me	thod: I	EPA 200/30	05 Diss									
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030756-BLK1)								Extr	acted:	03/24/09 11	:38			
Copper	EPA 200.8	ND		0.00200	mg/l	1x							03/25/09 22:13	
Lead	H	ND		0.00100	"	**	••						"	
Zinc	н	ND		0.00500	Ħ	W							n	
LCS (9030756-BS1)								Extr	acted:	03/24/09 11	:38			
Copper	EPA 200.8	0.0943		0.00200	mg/l	1x		0.100	94.3%	(85-115)			03/25/09 22:19	
Lead	*	0.103		00100.0		**			103%	**				
Zinc	н	0.101		0.00500	**	"		"	101%	H			n	
Duplicate (9030756-DUP1)				QC Source:	PSC0443-4	02		Extr	acted:	03/24/09 11	:38			
Copper	EPA 200.8	0.00530		0.00200	mg/l	1x	0.00535				0.845%	(20)	03/25/09 22:29	
Lead	n	ND		0.00100		"	ND				NR	"	•	
Zinc	н	0.106		0.00500	н	"	0.107				1.22%	17	я	
Matrix Spike (9030756-MS1)			_	QC Source:	PSC0444-	01		Extr	acted:	03/24/09 11	:38			
Copper	EPA 200.8	0.103		0.00200	mg/l	lx	0.0106	0.100	92.1%	(70-130)			03/25/09 22:45	
Lead	н	0.101		0.00100		17	0.000935	,	99.7%	н			"	
Zinc	н	0.208		0.00500	n	"	0.109	**	98.8%	"			н	
Matrix Spike (9030756-MS2)				QC Source:	PSC0573-0)2		Extr	acted:	03/24/09 11	:38			
Copper	EPA 200.8	0.110		0.00200	mg/l	1 x	0.0200	0.100	90.4%	(70-130)			03/25/09 23:50	
Lead	n	0.100		0.00100	17	**	0.000243	"	99.7%	•			"	
Zinc	н	0.645		0.00500			0.553		92.1%	**				

TestAmerica Portland

Darrell Auvil For Brian Cone, Industrial Services Manager



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

15550 N. Lombard Terminal 5 Portland, OR 97203

Project Number: Project Manager: NA Katrina Greene Report Created: 03/30/09 15:14

Conventional Chemistry Parameters per Standard Methods - Laboratory Quality Control Results

TestAmerica Portland

			16	SIAIIICIIC	a Fortiano					302 33		
QC Batch: 9030578	Water P	reparation M	lethod: Ge	eneral Pre	paration							·
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike % Amt REC	(Limits) %	(Limi	ts) Analyzed	Notes
Blank (9030578-BLK1)								Extracted:	03/18/09 14:00			
Total Suspended Solids	SM 2540D	ND		10.0	mg/l	lx				. <u></u>	03/18/09 17:34	
LCS (9030578-BS1)								Extracted:	03/18/09 14:00			
Total Suspended Solids	SM 2540D	50.0		10.0	mg/l	1x		50.0 100%	(80-120)		03/18/09 17:34	
Duplicate (9030578-DUP1)				QC Source:	PSC0445-0)1		Extracted:	03/18/09 14:00			
Total Suspended Solids	SM 2540D	ND		10.0	mg/l	lx	ND		N	(20)	03/18/09 17:34	

TestAmerica Portland

hall W. Amil

Darrell Auvil For Brian Cone, Industrial Services Manager



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: Project Manager: NA

Katrina Greene

Report Created: 03/30/09 15:14

Lab Filtration - Laboratory Quality Control Results

TestAmerica Portland

QC Batch: 9030482 Water Preparation Method: Lab Filter

Analyte Method Result MDL* MRL Units Dil Source Spike % (Limits) % (Limits) Analyzed Notes
Result Amt REC

Blank (9030482-BLK1) Extracted: 03/16/09 17:41

Lab Filtration NCA SOP ND --- 1.00 N/A 1x -- -- -- -- 03/16/09 18:31

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Chull W. Amil

Darrell Auvil For Brian Cone, Industrial Services Manage

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PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

NA

15550 N. Lombard Terminal 5

Project Number:
Project Manager:

Katrina Greene

Report Created: 03/30/09 15:14

Notes and Definitions

Report Specific Notes:

wet

Limits

Portland, OR 97203

M8 - The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).

Laboratory Reporting Conventions:

DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.

ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).

NR/NA Not Reported / Not Available

dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.

Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported

on a Wet Weight Basis.

RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).

MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.

MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported

as Estimated Results.

Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution

found on the analytical raw data.

Reporting - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and

percent solids, where applicable.

Electronic - Electronic Signature added in accordance with TestAmerica's Electronic Reporting and Electronic Signatures Policy.

Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory.

Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Darrell Auvil For Brian Cone, Industrial Services Manager

TestAmerica Portland

9405 SW Nimbus Avenue

Chain of Custody Record



Beaverton, OR 97008

phone 503.906.9200 fax 503.906.9210																_			TestAmerica Labo	ratories, Inc.
Client Contact	Work	Order	#			П				Т										
Kinder Morgan Bulk Terminals. T5-Portland						: ا	ا ي							-					Analysis Turn	amound Time
15550 N Lombard Terminal 5		701	1 1	42)		ãΙ		1 1	Ì			1 1	1			Ì		Analysis ruru	around rime
Portland, OR 97203	<u> </u>	17(204	CL	•		<u>کا</u>						11							
503-285-4200 Phone							SS SM 2540D		ء ا				1 1							
503-285-7733 FAX	Tempera	ture Upo	n Receipt:				2 8	0	2	<u> </u>			11	Į			l		10 D	AY
Client PM: Katrina Greene	1						<u>ح</u> اق	0	}	되る										
Project Name: Stormwater	1	3	i.				<u> </u>	18		ي الإ	1 1									
Laboratory PM: Brian Cone	1	Ö	1			취,	5 8	18		ا الا الالا										
Sample Identification	Sample Date	Sample Time	Preservation Used	Matrix	# of Cont.	Filtered Sa	Solids TSS SM 2540D	0&G 16	FT-pH:	DISS (c, Ps, 21)									Sample Spec	cific Notes:
Outfall 001	4450	1715	1, 2, 4	Water			x x	x	X X	<		TT			T			Ī	*Analyze ı	undiluted
rulvent	USAY	1710	1,4	willer	ک		X	T	П	X									** Don't s	ub O&G
			<u> </u>			П														
						╁	+	┿	++	+	╁╌┼╴	+-+	+-1	+	+	\vdash	+	╁	 	
	<u> </u>	<u> </u>	<u> </u>	<u> </u>		Н		╄.		_	1	1-1-	1-1	\perp	1_	\vdash	_	-	<u> </u>	
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	 					╁┼	+	╁	╂╼╾╂╼	╅	++	++	+	\vdash	┼	\vdash	+	╁	}	
	<u> </u>					\sqcup	_	<u> </u>	₩.	4_	$\sqcup \bot$	$\bot \bot$	\bot		_	\perp	_	4		
																11				
	1	1				Π			\sqcap		\Box				T			1		
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaO Special Instructions/QC Requirements & Comments:	H; 6= Other								<u> </u>		<u> </u>					Ll.			1	
Received by:	Company:			Date/Tir	ne:						IN	I LA	<u>2</u> .	Comp	any:				Date/Time:	INT
Lawrence Spangler	Test Ame	rica Portlar	ad	03-44	1-09		17	15			<u> </u>		ی.	Test	Ameri	ca Po	rtiano	1	03-16-09	1045



Sampling Documentation Form

01: 4 16:		Tamainala, TE Do	Hond		
		ulk Terminals: T5-Po	ruanu		1
	awrence Spar	ngler	D-4	Parki ca	
Site: Outfall				03-14-09	
Project: Sto	rmwater		Time: _	1705	
Sample Ma					
Water	□ Soil	□ HW □ Ch	nemical 🗆 Drii	nking	
Sampling I	Method:				
Grab					
Grab Samp	oling Equipm	ient:			
Dipper	Time:	710 , 1715			
_ · F. F · ·				 	
Field Data:					
pH:7.1		calibration-7.00 buffer	r reading: 7	2.05	
pri		calibration slope:		· · · · · · · · · · · · · · · · · · ·	
	ргіс	alibration Stope.			
Field Cond	itions:				
		- Dorthy aloudy	X Cloudy	- Spowing	
		□ Partly cloudy			- None
Raintaii:	□ Heavy	☆ Continuous	Intermitter	it a Light	□ None
	4 • 4•				
	aracteristics				
Color:	Odo	r: 1SS	:		
Sediment:		Foam:			
Sediment:		Foam:			
Sediment:	ons and Com	Foam:			
Sediment:		Foam:			
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Sediment:		Foam:			
Sediment:		Foam:			
Sediment:		Foam:			

Revision #0 8/19/08

TestAmerica Portland Sample Receiving Checklist

Worl	k Ord	er #: PSC 0443 Date/Time Received: 03-16-09 1045
		ne and Project: Kinder Moran Stormware
Resid Quote	ual Ch :#:	plete This Section: Yes No Yes No lorine Check Required: Quarantined: Uctions:
	Zone: T/EST	CDT/CST MDT/MST PDT/PST OTHER
Co	oler #(: erature	Temperature out of Range: Not enough or No Ice
N/A	Yes	No Initials
X		1. If ESI client, were temp blanks received? If no, document on NOD.
X		2. Cooler Seals intact? (N/A if hand delivered) if no, document on NOD.
•	X	3. Chain of Custody present? If no, document on NOD.
	X	4. Bottles received intact? If no, document on NOD.
	K	5. Sample is not multiphasic? If no, document on NOD.
	×	6. Proper Container and preservatives used? If no, document on NOD.
	Ø	7. pH of all samples checked and meet requirements? If no, document on NOD.
Ø		8. Cyanide samples checked for sulfides and meet requirements? If no, notify PM.
X		9. HF Dilution required?
	X	10. Sufficient volume provided for all analysis? If no, document on NOD and consult
	X	PM before proceeding. II. Did chain of custody agree with samples received? If no, document on NOD.
		12. Were VOA/Oil Syringe samples without headspace?
X		13. Were VOA vials preserved? HCL Sodium Thiosulfate Ascorbic Acid
		14. Did samples require preservation with sodium thiosulfate?
abla		15. If yes to #14, was the residual chlorine test negative? If no, document on NOD.
X	\mathbf{X}	[16. Are dissolved/field filtered metals bottles sediment-free? If no, document on NOD.
		17. Is sufficient volume provided for client requested MS/MSD or matrix duplicates? If no. document on NOD and contact PM before proceeding.
\Box X		18. Are analyses with short holding times received in hold?
ŕ	X	19. Was Standard Turn Around (TAT) requested?
	X	20. Receipt date(s) < 48 hours past the collection date(s)? If no, notify PM.

F:\Sample_Receiving\Receiving_Documents\Forms (effective 3/16/09)

TestAmerica Portland Sample Receiving Checklist

Work Order #: **PSCO443**

Log	in Ch	eck	Initials:	
N/A	Yes	No		
	5		. Sufficient volume provided for all analysis? If no, document on NOD & contact PM	V
∇			Sufficient volume provided for client requested MS/MSD or matrix duplicates? If	
7			, document on NOD and contact PM.	
	$\mathbf{\nabla}$. Did the chain of custody include "received by" and "relinquished by" signatures,	
			tes and times?	
	X		. Were special log in instructions read and followed?	
	S		. Were tests logged checked against the COC?	
	2		Were rush notices printed and delivered?	
X			. Were short hold notices printed and delivered?	
X			Were subcontract COCs printed?	
X			Was HF dilution logged?	
• •			<u></u>	
Lab	eling	and	orage Checks: Initials:	
N/A	Yes	No	V.	
本			Were the subcontracted samples/containers put in Sx fridge?	
	K		. Were sample bottles and COC double checked for dissolved/filtered metals?	
	X		. Did the sample 1D, Date, and Time from label match what was logged?	
\Box			. Were Foreign sample stickers affixed to each container and containers stored in	
•			reign fridge?	
4			. Were HF stickers affixed to each container, and containers stored in Sx fridge?	
	ment a (NOD)		ems or discrepancies and the actions taken to resolve them on a Notice of Discrepance	ЭУ

F: Sample_Receiving\Receiving_Documents\Forms (effective 3/16/09)



PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132

ph: (503) 906.9200 fax: (503) 906.9210

ORELAP#: OR100021

February 17, 2009

Katrina Greene Kinder Morgan Bulk Terminals: T5-Portland 15550 N. Lombard Terminal 5 Portland, OR 97203

RE: Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 02/11/09 13:45. The following list is a summary of the Work Orders contained in this report, generated on 02/17/09 16:22.

If you have any questions concerning this report, please feel free to contact me.

Work Order	<u>Project</u>	ProjectNumber
PSB0312	Stormwater	NA

TestAmerica Portland

Bran L. Come

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.



PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

15550 N. Lombard Terminal 5 Portland, OR 97203

Project Number: Project Manager: NA

Report Created: 02/17/09 16:22 Katrina Greene

ANALYTICAL REPORT FOR SAMPLES

				-
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Outfall 001	PSB0312-01	Water	02/10/09 13:30	02/11/09 13:45
Pond	PSB0312-02	Water	02/10/09 13:45	02/11/09 13:45
Culvent	PSB0312-03	Water	02/10/09 13:25	02/11/09 13:45

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ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: Project Manager: NA

Katrina Greene

Report Created: 02/17/09 16:22

Oil and Grease Analysis per EPA Method 1664

TestAmerica Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSB0312-01	(Outfall 001)			Wa	ter		Sam	pled: 02/10/	09 13:30		
Oil & Grease	-	EPA 1664	ND		2.36	mg/l	1x	9020400	02/12/09 15:17	02/16/09 20:11	

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9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name: Project Number: Stormwater

Project Manager:

NA Katrina Greene Report Created: 02/17/09 16:22

Total Metals per EPA 200 Series Methods

TestAmerica Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSB0312-01	(Outfall 001)			w	ater		Sam	pled: 02/10/	09 13:30		
Copper		EPA 200.8	ND		0.00200	mg/l	1x	9020373	02/12/09 09:12	02/13/09 00:05	
Lead		"	ND		0.00100	"	**	**	н	n	
Zinc		**	0.209		0.00500	**	"	n	н	#	
PSB0312-02	(Pond)			w	ater		Sam	pled: 02/10/	09 13:45		
Zinc		EPA 200.8	ND		0.00500	mg/l	lx	9020373	02/12/09 09:12	02/13/09 00:12	····
PSB0312-03	(Culvent)			w	ater		Sam	pled: 02/10/	09 13:25		
Zìnc		EPA 200.8	4.31	*****	0.0500	mg/l	10x	9020373	02/12/09 09:12	02/13/09 00:55	

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: Project Manager: NA

Katrina Greene

Report Created: 02/17/09 16:22

Field Testing of Conventional Chemistry Parameters per APHA/EPA Methods

TestAmerica Portland

					1 CSLFXIII	Crica i orti	ana					
Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes	
PSB0312-01	(Outfall 001)			Wa	ter		Sam	pled: 02/10/	09 13:30			
pН		EPA 150.1	6.86			pH Units	lx	9020389	02/10/09 13:35	02/10/09 13:40		

TestAmerica Portland

Been L Come

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: Project Manager: NA

Katrina Greene

Report Created: 02/17/09 16:22

Oil and Grease Analysis per EPA Method 1664 - Laboratory Quality Control Results

TestAmerica Portland

				CSLATHICTIC	1 i Ottiali	u								
QC Batch: 9020400	Water P	reparation N	lethod: O	&G prep	CE									
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits) Analyzed	Notes
Blank (9020400-BLK1)								Extra	acted:	02/12/09 1	5:17			
Oil & Grease	EPA 1664	ND		5.00	mg/l	lx							02/16/09 16:45	
LCS (9020400-BS1)								Extra	acted:	02/12/09 1	5:17			
Oil & Grease	EPA 1664	35.8			mg/l	lx		40.0	89.5%	(78-114)			02/16/09 16:45	
Matrix Spike (9020400-MS1)				QC Source:	PSB0128-	-04		Extra	acted:	02/12/09 15	5:17			
Oil & Grease	EPA 1664	24.4			mg/l	1x	0.490	40.0	59.8%	(78-114)			02/16/09 16:45	М8
Matrix Spike Dup (9020400-MS	D1)			QC Source:	PSB0128-	-04		Extra	acted:	02/12/09 1	5:17			
Oil & Grease	EPA 1664	31.6			mg/l	lx	0.490	40.0	77.8%	(78-114)	25.7%	6 (18)	02/16/09 16:45	

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Stormwater Project Name:

Project Number: Project Manager:

Katrina Greene

Report Created: 02/17/09 16:22

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

	,			`estAmeric	a Portland	· · · · · · · · · · · · · · · · · · ·								
QC Batch: 9020373	Water P	reparation M	lethod: E	PA 200/30	05									
analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits) Analyzed	Notes
Blank (9020373-BLK1)								Extr	acted:	02/12/09 09	:12			
Copper	EPA 200.8	ND		0.00200	mg/l	1 x		-					02/12/09 20:57	
Lead	**	ND		0.00100	"	"							H	
Zinc	*	ND		0.00500		"	**						*	
LCS (9020373-BS1)	=							Extr	acted:	02/12/09 09	:12			_
Соррег	EPA 200.8	0.101		0.00200	mg/l	1x		0.100	101%	(85-115)			02/12/09 21:04	
ead	u	0.0980		0.00100	н	*		"	98.0%	н			**	
Zinc	н	0.0983		0.00500	н	**		"	98.3%	н			**	
Duplicate (9020373-DUP1)				QC Source:	PSB0162-0	16		Extr	acted:	02/12/09 09	:12			_
Соррег	EPA 200.8	ND		0.00200	mg/l	lx	ND				NR	(20)	02/12/09 21:19	
Lead	M	ND		0.00100	н	**	ND				9.93%	*	н	
Zinc	u	ND		0.00500	н	"	ND				0.434%	. "	•	
Matrix Spike (9020373-MS1)				QC Source:	PSB0204-0	14		Extr	acted:	02/12/09 09	:12			
Соррег	EPA 200.8	0.0960		0.00200	mg/l	1x	0.000680	0.100	95.3%	(75-125)			02/12/09 21:48	
Lead	H	0.0964		0.00100	н	**	ND	н	96.4%	"				
Zinc	U	0.100		0.00500	н	4	0.00257	н	97.8%	(70-130)			**	
Matrix Spike (9020373-MS2)				QC Source:	PSB0207-0	2		Extr	acted:	02/12/09 09	:12			
Copper	EPA 200.8	1.02		0.0200	mg/l	10x	0.906	0.100	114%	(75-125)			02/13/09 00:48	
Lead	н	0.0891		0.00100	**	1 x	0.00559	н	83.5%	*			02/12/09 22:31	
Zinc	11	2.85		0.0500		10x	2.69		159%	(70-130)			02/13/09 00:48	Mi

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PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Project Name:

Stormwater

Katrina Greene

Project Number: Project Manager: NA

02/17/09 16:22

Report Created:

Notes and Definitions

Report Specific Notes:

Portland, OR 97203

M8

The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).

MHA

Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).

Laboratory Reporting Conventions:

DET

Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.

ND

Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).

NR/NA

Not Reported / Not Available

dry

Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.

wet

Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported

on a Wet Weight Basis.

RPD

RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).

MRL

METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.

MDL*

METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.

Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.

Reporting -Limits

Dil

Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.

Electronic

Signature

Electronic Signature added in accordance with TestAmerica's Electronic Reporting and Electronic Signatures Policy. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Portland

a L Come

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TestAmerica Portland

9405 SW Nimbus Avenue

Chain of Custody Record



Beaverton, OR 97008

phone 503,906,9200 fax 503,906,9210																				TestAmerica L	aboratories, Inc.
Client Contact	Work	Order	#			П							Т			T]	
Kinder Morgan Bulk Terminals: T5-Portland	1						*				ļ							-		Analysis T	urnaround Time
15550 N Lombard Terminal 5	<u> </u>	^ -					200.8	Í		1	1	1 1		1		1	1	1		/ than your	
Portland, OR 97203	V	SRA	03/2)			22													.,	
503-285-4200 Phone							ا کے	3 {	i	ام				1				ĺ		3	
503-285-7733 FAX	Tempera	ture Upo	n Receipt	:			يَّا إِنَّ	3 2	[S										14	DAY
Client PM: Katrina Greene			. ~				इंब	<u> </u>		뒽	-	1			- 1	1	1 1		1	L	
Project Name: Stormwater			$-\sqrt{1/2}$			اوا	ا ا		$ \infty $	اج										l	
Laboratory PM: Brian Cone						M.	212	<u> </u>	ند	S.		1 1									
Sample Identification	Sample Date	Sample Time	Preservation Used	Matrix	# of Cont.	Ittered &	7. Po	Sellus,	부	Sampling Event-Grab	2									Sample	Specific Notes:
	2/10	1330	1, 2, 4	Water		Ħ	x 3	(x	X	x	+-	Ħ	╪		\dashv	+	† †	+	十		ze undiluted
Outfall 001			ļ	 	-	H	7	-	+			1 1	+	╁┤	}	-}-	╀┦	+	+	ļ	
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Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3;	5=NaOH: 6= Other																				
Special Instructions/QC Requirements & Comments:																					
Received by:	Company:			Date/Tir				(2)		_	T	IN I	AF	⊀	Com	-	_			Date/Time: 02 - 11-09	1345
Lawrence Spangler	Test Amer	ica Portlar	nd	102	-10-	CM		15	15				12		Test	Amer	ica Po	ortlan	d	J. 7 0. 1	

	Tes	tAmerica Sample l	Receip	t Checklist	~ 1~		*
Received by:	Unpacked by:	Logged-in by:		Work Order No.	10012		
(section A)	(section B)	مماييا		Client: KI DOLLY	VIUTU	w	man in the fig.
Date: <u>02-11-05</u>	Date: 2111011	Date: 211109		Project: STOYMV	vorte	Υ	
Time: 1347	Initials: 1	Initials:	ノ	Tempe	rature out c	of range:	
Initials: 427		U^{*}					enough Ice
***ESI Clients (see Section C	21			D: : #4			telted
<u> </u>				Digi #1 Digi #2		W/in	4 Hours
Cooler Temperature (IR):	1.2 C plastic gl	lass NA (oil/air samples	, ESI clie	nt) Temperature Blank:		C	· · · · · · · · · · · · · · · · · · ·
A Custody Seals: (#	_)		В	Sample Statu (If N circled, see			
Signature: Y N Dated:	Besite	ad fram.		General:	_		
None	Receive	ed from:	1	Intact?	Y	N	
Container Type:		★ TA Courier	1	# Containers Match COC?	Y	N	none given
<u>Container Type.</u> <u></u> <u></u> <u></u> <u></u> #Cooler(s	١	Senvoy	1			A.I	J
#Box(s)	,	UPS	1	IDs Match COC?	U	N	
	#Other:)	Fed Ex Client	1	For Analyses Requested: Cyanide Checked?	Y	N	ÑA
		TDP	1	Correct Type & Preservation?	Ý.	N.	\mathcal{O}
Coolant Type:		DHL	1	Adequate Volume?	Υ :	N	
Gel Ice		SDS		Within Hold Time?	\y/	N	
Loose ice		Mid-Valley	1	HF Dilution Required?	Y	(N)	
None		GS/TA		Volatiles/ Oil Quality:			**
Packing Material:		GS/Senvoy	1	VOAs/ Syringes free of Headspace	e? Y	N	NA
Bubble Ba	igs	Other:	1	TB on COC? not provided	Y	N	, NA
Styrofoam	Cubbies			Metals:			
Peanuts			1	HNO3 Preserved?	(y)	N	NA
None (Other:)		1	Dissolved Metals Filtered?	Y	N	(N)
C ***ESI Clients Only:			FED E	X/ UPS: Was the tracking paper ke	epable?	YES	NO
Temperature Blank: _	°C not provided	Digi: # 1 #2]]	If circled NO, what is the Tracking num	ber?		
All preserved bot All preserved acc	tles checked Y N	NA (voas/soils/all unp.) NOD) NA (voas/soils/all unp.)	FED		DHL	Oth	er
		Project	Managers	:			
Comments:							
		PM Reviewed:		(Initial/Date)			



Sampling Documentation Form

vrence Spang 101 nwater ix:	gler	Date: <u>02-10-0</u> 7 Time: 1330	
nwater		Date: <u>02-10-04</u> Time: <u>1330</u>	
ix:		Time: 1330	
□ Soil	□ HW □ Ch	nemical Drinking	
ethod:			
Time:/ ;	B3C: punc	1 1345 / Ul vent 1325	
pH ca	llibration-7.00 buffe	er reading: 7 05	
ions:			41.
□ Sunny			
x Heavy	x Continuous	□ Intermittent □ Light	□ None
racteristics:			
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s and Comn			
	pH calions: Sunny Heavy racteristics: Odor:	pH calibration-7.00 buffe pH calibration-7.00 buffe ions: □ Sunny □ Partly cloudy □ Heavy ☒ Continuous	pH calibration-7.00 buffer reading:

Revision #0 8/19/08



PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

ORELAP#: OR100021

January 03, 2009

Katrina Greene Kinder Morgan Bulk Terminals: T5-Portland 15550 N. Lombard Terminal 5 Portland, OR 97203

RE: Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 12/15/08 13:45. The following list is a summary of the Work Orders contained in this report, generated on 01/03/09 16:03.

If you have any questions concerning this report, please feel free to contact me.

Work Order	<u>Project</u>	<u>ProjectNumber</u>
PRL0504	Stormwater	NA

TestAmerica Portland

Bean L Come

Brian Cone, Industrial Services Manager



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Project Manager:

Stormwater

Project Number:

NA Katrina Greene Report Created: 01/03/09 16:03

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Outfall 001	PRL0504-01	Water	12/12/08 16:10	12/15/08 13:45

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.



PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Katrina Greene

Project Number: Project Manager: NA

Report Created:

01/03/09 16:03

Oil and Grease Analysis per EPA Method 1664

TestAmerica Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRL0504-01	(Outfall 001)			Wa	ter		Sam	pled: 12/12/	08 16:10		
Oil & Grease		EPA 1664	ND		2.36	mg/l	1x	8120852	12/31/08 16:45	01/01/09 15:50	

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Brian Cone, Industrial Services Manager



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: Project Manager: NA Katrina Greene Report Created:

01/03/09 16:03

Total Metals per EPA 200 Series Methods

TestAmerica Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes	
PRL0504-01	(Outfall 001)			Water Sampled: 12/12/08 16:10								
Copper		EPA 200.8	0.0188		0.00200	mg/l	lx	8120644	12/18/08 14:05	12/19/08 01:20		
Lead		н	0.00570		0.00100	ш	u		*	**		
Zinc		и	1.02		0.0500	*	10x	"	"	12/19/08 15:32		

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Beam L Come

Brian Cone, Industrial Services Manager



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: Project Manager: NA Katrina Greene Report Created:

01/03/09 16:03

Conventional Chemistry Parameters per Standard Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRL0504-01 (Outfall 001)			Wa	iter		Sam	pled: 12/12/	/08 16:10		
Total Suspended Solids	SM 2540D	64.0		4.00	mg/l	1x	8120673	12/19/08 11:02	12/19/08 13:15	

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Becan L Come

Brian Cone, Industrial Services Manager



PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Project Manager:

Stormwater

Project Number:

Katrina Greene

Report Created: 01/03/09 16:03

Field Testing of Conventional Chemistry Parameters per APHA/EPA Methods

TestAmerica Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRL0504-01	(Outfall 001)			Wa	ter	_	Sam	pled: 12/12/	08 16:10		
рН		EPA 150.1	6.48			pH Units	1x	8120597	12/12/08 16:15	12/12/08 16:20	

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Bean L Come

Brian Cone, Industrial Services Manager



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

Katrina Greene

15550 N. Lombard Terminal 5 Portland, OR 97203 Project Number: Project Manager: NA

Report Created: 01/03/09 16:03

Oil and Grease Analysis per EPA Method 1664 - Laboratory Quality Control Results

TestAmerica Portland

The state of the s			1	estAmenc	a Portiano				- C		1111		
QC Batch: 8120852	Water F	Preparation M	lethod: O	d: O&G prep CE									
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike % Amt REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8120852-BLK1)								Extracted:	12/31/08 14	1:00			
Oil & Grease	EPA 1664	ND		5.00	mg/l	lx						01/01/09 15:50	
LCS (8120852-BS1)								Extracted:	12/31/08 14	1:00			
Oil & Grease	EPA 1664	35.1			mg/l	1x		40.0 87.8%	(78-114)			01/01/09 15:50	
Matrix Spike (8120852-MS1)				QC Source:	PRL0495-	01		Extracted:	12/31/08 14	1:00			
Oil & Grease	EPA 1664	34.3			mg/l	1x	1.62	40.0 81.7%	(78-114)		**	01/01/09 15:50	
Matrix Spike (8120852-MS2)				QC Source:	PRL0527-	01		Extracted:	12/31/08 14	l:00			
Oil & Grease	EPA 1664	29.4			mg/l	lx	23.6	40.0 14.5%	(78-114)			01/01/09 15:50	МНА

TestAmerica Portland

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

THE LEADER IN ENVIRONMENTAL TESTING

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name: Project Number: Stormwater

Project Manager:

NA Katrina Greene

Report Created: 01/03/09 16:03

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

TestAmerica Portland

A A A A A A A A A A A A A A A A A A A				TestAmeric	a Portiano	1 ,	_							
QC Batch: 8120644	Water P	reparation Me	thod:	EPA 200/30	05									
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)) Analyzed	Notes
Blank (8120644-BLK1)								Exti	racted:	12/18/08 14	:05			
Copper	EPA 200.8	ND		0.00200	mg/l	lx							12/18/08 23:56	
Lead	11	ND		0.00100	н	н							**	
Zinc	ū	ND		0.00500	•				-				н	
LCS (8120644-BS1)								Extr	acted:	12/18/08 14:	:05			
Copper	EPA 200.8	0.0970		0.00200	mg/l	1x		0.100	97.0%	(85-115)			12/19/08 00:01	
Lead	**	0.0902		0.00100	и	н		*	90.2%	**			*	
Zinc	*	0.0938		0.00500	п	н			93.8%	"			*	
Duplicate (8120644-DUP1)				QC Source:	PRL0496-	01		Extr	acted:	12/18/08 14:	:05			
Copper	EPA 200.8	ND		0.00200	mg/l	lx	ND				5.88%	(20)	12/19/08 00:12	
Lead	ij	ND		0.00100			ND				4.51%	"	*	
Zinc	II.	ND		0.00500	"	н	ND				2.22%	*	н	
Matrix Spike (8120644-MS1)				QC Source:	PRL0496-	02		Extr	acted:	12/18/08 14:	:05			
Copper	EPA 200.8 .	0.0980		0.00200	mg/l	1x	0.00201	0.100	96.0%	(75-125)			12/19/08 00:22	
Lead	н	0.0875		0.00100		**	0.000284	•	87.2%	•			н	
Zinc	н	0.0972		0.00500	н		0.00241		94.8%	(70-130)			п	
Matrix Spike (8120644-MS2)				QC Source:	PRL0504-	01		Extr	acted:	12/18/08 14:	:05			
Copper	EPA 200.8	0.112		0.00200	mg/l	lx	0.0188	0.100	93.0%	(75-125)			12/19/08 01:25	
Lead	•	0.0886		0.00100	•		0.00570	"	82.9%	n			•	
Zinc	н	1.11		0.0500	**	10x	1.02	**	87.0%	(70-130)			12/19/08 15:38	

TestAmerica Portland

Bream L Corre

Brian Cone, Industrial Services Manager



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

THE ELACER IN CHARGINGIAC IESTING

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

Katrina Greene

15550 N. Lombard Terminal 5 Portland, OR 97203 Project Number: Project Manager:

NA

Report Created: 01/03/09 16:03

Conventional Chemistry Parameters per Standard Methods - Laboratory Quality Control Results

TestAmerica Portland

												
QC Batch: 8120673	Water P	reparation M	lethod: Ge	eneral Pro	paration							
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike % Amt REC		ん (Limi PD	ts) Analyzed	Notes
Blank (8120673-BLK1)								Extracted:	12/19/08 11:02			
Total Suspended Solids	SM 2540D	ND		10.0	mg/l	1x					12/19/08 13:15	
LCS (8120673-BS1)								Extracted:	12/19/08 11:02			
Total Suspended Solids	SM 2540D	50.0		10.0	mg/l	lx	-	50.0 100%	(80-120)		12/19/08 13:15	
Duplicate (8120673-DUP1)				QC Source:	PRL0584-0)1		Extracted:	12/19/08 11:02			
Total Suspended Solids	SM 2540D	20.0		10.0	mg/l	lx	20.0		0	.00% (20)	12/19/08 13:15	

TestAmerica Portland

Becan L Come

Brian Cone, Industrial Services Manager



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: Project Manager: NA Katrina Greene Report Created: 01/03/09 16:03

Notes and Definitions

Report Specific Notes:

MHA - Du

 Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).

Laboratory Reporting Conventions:

DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.

ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).

NR/NA _ Not Reported / Not Available

dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.

wet Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.

RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).

MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.

MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B.
 *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.

Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.

Reporting - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.

Electronic Signature - Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*.

Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Portland

Bran L Come

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

TestAmerica Portland

9405 SW Nimbus Avenue

Chain of Custody Record



Beaverton, OR 97008

phone 503.906.9200 fax 503.906.9210 TestAmerica Laboratories, Inc. Work Order # Client Contact Kinder Morgan Bulk Terminals: T5-Portland **Analysis Turnaround Time** 15550 N Lombard Terminal 5 Portland, OR 97203 O&G 1664/9070 Total** Cu, Pb, Zn Total ICPMS Solids, TSS SM 2540D 503-285-4200 Phone Temperature Upon Receipt: **10 DAY** 503-285-7733 FAX Client PM: Katrina Greene 190 Project Name: Stormwater Laboratory PM: Brian Cone Sample Sample Sample Identification Date Time Matrix Cont. Sample Specific Notes: 1610 Χ Х *Analyze undiluted 12+12 Water 1, 2, 4 Outfall 001 ** Don't sub O&G Preservation Used: 1= Ice, 2= HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6= Other___ Special Instructions/QC Requirements & Comments: Date/Time: / 2-15-03 Received by: Company: Date/Time: Company: IN LAB: 1610 1345 12-17-62 Test America Portland Test America Portland Lawrence Spangler 🛶

	1 68	stAmerica Sampie i	Receipt Cr	ieckiist			Facebook Higher Control
Received by:	Unpacked by:	Logged-in by:		Work Order No.	L0504		<u>. </u>
*(section A)	'(section B)	, .		Client: Kinder W	organ Bull	K Ter	m. T-S Portland
Date: 12-15-06	Date: 12 15 0 F	Date: 12-115 06	•	Project: Storm	water		
Time: 1345	ا المناطقة المناطقة المناطقة المناطقة المناطقة المناطقة المناطقة المناطقة المناطقة المناطقة المناطقة المناطقة	Initials:		Теп	nperature out	of range:	
Initials: 42> ***ESI Clients (see Section Cooler Temperature (IR):		plass NA (oil/air samples	, ESI client)	Digi #1 Digi #2 Temperature Blank: _		Nol	Melted o 4 Hours
A Custody Seals: (#)		В	Sample St (If N circled,			
Signature: Y N Dated	d:		Gen	eral:			
None	<u>Recei</u>	ved from:		Intact?	Υ	N	
Container Type:		XTA Courier Senvoy		# Containers Match COC?	Υ	N	none given
#Coole	er(s)	UPS	1	IDs Match COC?	, Υ	N	
#Box(s	s)	Fed Ex	l For	Analyses Requested:			
None (#Other:)	Client		Cyanide Checked?	Υ	N	(NA
Coolant Type:		TDP	1	Correct Type & Preservatio	n? 〈Y〉	N	
Gel Ice	<u> </u>	DHL	1	Adequate Volume?	Υ	N	
Loose	A A CONTRACTOR	SDS	İ	Within Hold Time?	A v /	N	
None		Mid-Valley	Vola	tiles/ Oil Quality:	→	IN	4
Packing Material:		GS/TA GS/Senvoy		DAs/ Syringes free of Heads _l	pace? Y	N	NA
<u>Facking Material.</u> Bubble	n Page	Other:	I I T	B on COC? not provide	ed Y	N	NA
	oam Cubbies		í ₁ Meta	ıls:			The second
Styron		· · · · · · · · · · · · · · · · · · ·		HNO3 Preserved?	(\overline{Y})	N	NA
	Other:		1	Dissolved Metals Filtered?	Y	N	NA
× None (Otner/		1				
C ***ESI Clients Only:			FED EX/ UP	S: Was the tracking pape	r keepable?	YES	NO
Temperature Blan	k:°C not provide	d Digi: # 1 #2	If circ	led NO, what is the Tracking n	umber?		
All preserved All preserved	I bottles checked Y N I accordingly? Y N (see	NA (voas/soils/all unp.) NOD) NA (voas/soils/all unp.)	FED EX	Goldstreak UPS	DHL	Oth	er:
		Project	Managers:				
Comments:		PM Reviewed:		(Initial/Date)			



THE LEADER IN ENVIRONMENTAL TESTING

Sampling Documentation Form

l .	gan Bulk Termina l s	: T5-Portland	
Sampler: Lawrence	e Spangler :	Deter	· 12 · · · · · ·
Site: Outfall 001 Project: Stormwate	\r ·		1242.08 1610
Project. Storriwate	er	Tille	(610)
Sample Matrix:			
<u> </u>	□ Soil □ H\	N Chemical	□ Drinkina
□ Other:		-	3
Sampling Method		∀ Grob	- Multi grab
U Comp-riow	□ Comp-rime	☆ Grab	□ Mulli-grab
Composite Samp	ling Equipment:		
□ ISCO #: C	Comp Samples/day:	Start time	: Stop time:
Sampler calibration	າ:		
Grab Sampling Ed		atuba - Othan	Time
X Dipper But	cket 🗆 Collwass	a tube	Time.
Field Data. pH:	Cond:	0 buffer reading: <u>6</u> Cl2: Flow-final:	96
Field Conditions:			
;	nny is Partly slo	udy x 'Cloudy	: Snowing
Rainfali: y He	avý 🔀 Contínuo	us Intermitter	ito Light Too Is Non-
part approximate with the part and recovery to the recovery to	F. Carriery and the control of the c		
Sample Character	ristics:	TOO.	
Color:		155.	
Sediment:	Foam:	· · · · · · · · · · · · · · · · · · ·	
Observations and	Comments:		

Revision #0 8/19/08



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

ORELAP#: OR100021

November 24, 2008

Katrina Greene Kinder Morgan Bulk Terminals: T5-Portland 15550 N. Lombard Terminal 5 Portland, OR 97203

RE: Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 11/10/08 17:10. The following list is a summary of the Work Orders contained in this report, generated on 11/24/08 16:56.

If you have any questions concerning this report, please feel free to contact me.

Work Order	<u>Project</u>	<u>ProjectNumber</u>
PRK0314	Stormwater	NA

TestAmerica Portland

Becan L. Com

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 905.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5 Portland, OR 97203 Project Name:

Stormwater

Project Number: Project Manager: NA Katrina Greene Report Created: 11/24/08 16:56

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Outfall 001	PRK0314-01	Water	11/10/08 09:30	11/10/08 17:10

TestAmerica Portland

Been L Com

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.



PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: NA Project Manager:

Katrina Greene

Report Created: 11/24/08 16:56

Oil and Grease Analysis per EPA Method 1664

TestAmerica Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRK0314-01	(Outfall 001)			Wa	iter		Sam	pled: 11/10/	08 09:30		
Oil & Grease		EPA 1664	ND		2.36	mg/l	lx	8110644	11/19/08 18:30	11/20/08 15:26	

TestAmerica Portland

Bream L. Come

Brian Cone, Industrial Services Manager



PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132

ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Project Manager:

Stormwater

Project Number:

Katrina Greene

Report Created: 11/24/08 16:56

Total Metals per EPA 200 Series Methods

TestAmerica Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRK0314-01	(Outfall 001)			w	ater		Sam	pled: 11/10/	08 09:30		
Copper		EPA 200.8	0.00399		0.00200	mg/l	1x	8110574	11/18/08 15:44	11/19/08 00:34	
Lead		н	0.00110		0.00100	**	н	"			
Zinc		"	0.621		0.00500	**	н	o	n	n	

TestAmerica Portland

Bream L Com

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Project Manager:

Stormwater

Project Number:

NA Katrina Greene Report Created: 11/24/08 16:56

Conventional Chemistry Parameters per Standard Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRK0314-01 (Outfall 001)			Wa	ter		Sam	pled: 11/10/	08 09:30		
Total Suspended Solids	SM 2540D	32.7		4.08	mg/l	lx	8110518	11/14/08 11:57	11/14/08 16:14	

TestAmerica Portland

Been L Com

Brian Cone, Industrial Services Manager



PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Katrina Greene

Project Number: Project Manager: NA

Report Created: 11/24/08 16:56

Field Testing of Conventional Chemistry Parameters per APHA/EPA Methods

TestAmerica Portland

				1 CSL/TIII	Crica i Orti	and				
Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRK0314-01 (Outfall 001)			Wa	ter		Sam	pled: 11/10/	08 09:30		
рН	EPA 150.1	6.42		,	pH Units	1x	8110435	11/10/08 09:35	11/10/08 09:40	

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Bean L. Com

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

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9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

15550 N. Lombard Terminal 5

Project Number:

NA

Report Created:

Portland, OR 97203

Project Manager:

Katrina Greene

11/24/08 16:56

	Oil and Gro	ease Analysi	•		1664 - 1 a Portland		tory Qua	ality Control Results
QC Batch: 8110644	Water F	reparation M	lethod: Od	&G prep	CE			
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike % (Limits) % (Limits) Analyzed Notes
Blank (8110644-BLK1)								Extracted: 11/19/08 18:00
Oil & Grease	EPA 1664	ND		5.00	mg/l	1x		11/20/08 15:26
LCS (8110644-BS1)								Extracted: 11/19/08 18:00
Oil & Grease	EPA 1664	38.2			mg/l	1x		40.0 95.5% (78-114) 11/20/08 15:26
LCS Dup (8110644-BSD1)								Extracted: 11/19/08 18:00
Oil & Grease	EPA 1664	38.5			mg/l	lx		40.0 96.2% (78-114) 0.782% (18) 11/20/08 15:26

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

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THE LEADER IN ENVIRONMENTAL TESTING

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Project Manager:

Stormwater

Project Number:

Katrina Greene

Report Created: 11/24/08 16:56

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

	.												·····	
QC Batch: 8110574	Water I	Preparation M	lethod: E	EPA 200/30	05									
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limit	s) Analyzed	Note
Blank (8110574-BLK1)								Exte	acted:	11/18/08 15	5:44			
Copper	EPA 200.8	ND		0.00200	mg/l	1x							11/18/08 23:36	
Lead	н	ND		0.00100	**	"							"	
Zinc	н	ND		0.00500	**	"							n	
LCS (8110574-BS1)		_			_			Exti	acted:	11/18/08 15	5:44		·-···	
Copper	EPA 200.8	0.101		0.00200	mg/l	1x		0.100	101%	(85-115)			11/18/08 23:41	
Lead	н	0.0998		0.00100	n	"		"	99.8%	"			н	
Zinc	н	0.0976		0.00500	**	**			97.6%	*			н	
Duplicate (8110574-DUP1)				QC Source:	PRK0313-	01		Exti	acted:	11/18/08 15	5:44			
Copper	EPA 200.8	0.0130		0.00200	mg/l	lx	0.0130				0.154%	(20)	11/19/08 00:13	
Lead	#	0.00133		0.00100		**	0.00131				1.14%		n	
Zinc	н	0.276		0.00500	"	**	0.275				0.435%	· "	'n	
Matrix Spike (8110574-MS1)				QC Source:	PRK0313-	01		Ext	acted:	11/18/08 15	5:44			
Соррег	EPA 200.8	0.113		0.00200	mg/l	lx	0.0130	0.100	99.7%	(75-125)			11/19/08 00:23	
Lead	11	0.101		0.00100	**	**	0.00131	•	99.8%	**			n	
Zinc	H	0.371		0.00500	"		0.275		96.0%	(70-130)		••	"	
Matrix Spike (8110574-MS2)				QC Source:	PRK0328-	01		Exte	acted:	11/18/08 15	5:44			
Соррег	EPA 200.8	0.105		0.00200	mg/l	1x	0.00593	0.100	99.4%	(75-125)			11/19/08 01:21	
Lead	**	0.101		0.00100		"	0.000639	"	100%	*				
Zinc	•	0.213		0.00500	**		0.119	"	94.4%	(70-130)				

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

Portland, OR 97203

15550 N. Lombard Terminal 5

Project Number: Project Manager:

Katrina Greene

Report Created: 11/24/08 16:56

Со	Conventional Chemistry Parameters per Standard Methods - Laboratory Quality Control Results TestAmerica Portland												
QC Batch: 8110518	Water P	reparation M	lethod: Ge	eneral Pre	paration								
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike % (Limits) % (Limits) Analyzed No Amt REC					
Blank (8110518-BLK1)							_	Extracted: 11/14/08 11:57					
Total Suspended Solids	SM 2540D	ND		10.0	mg/l	lx		11/14/08 16:14					
LCS (8110518-BS1)							_	Extracted: 11/14/08 11:57					
Total Suspended Solids	SM 2540D	50.0		0.01	mg/l	1x		50.0 100% (80-120) 11/14/08 16:14					
Duplicate (8110518-DUP1)				QC Source:	PRK0363-	01		Extracted: 11/14/08 11:57					
Total Suspended Solids	SM 2540D	76.9		7.69	mg/l	lx	76.9	0.00% (20) 11/14/08 16:14					

TestAmerica Portland

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

NA

15550 N. Lombard Terminal 5 Portland, OR 97203 Project Number: Project Manager:

Katrina Greene

Report Created: 11/24/08 16:56

Notes and Definitions

Report Specific Notes:

None

Laboratory Reporting Conventions:

DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.

ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).

NR/NA _ Not Reported / Not Available

dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.

wet Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported

on a Wet Weight Basis.

RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).

MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.

MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.

Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution

found on the analytical raw data.

Reporting Limits - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.

Electronic Signature

Dil

- Electronic Signature added in accordance with TestAmerica's Electronic Reporting and Electronic Signatures Policy.

Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory.

Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Portland

Bream L. Come

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

TestAmerica Portland

9405 SW Nimbus Avenue

Chain of Custody Record

TestAmerica ·

Beaverton, OR 97008

phone 503.906.9200 fax 503.906.9210																_			TestAmerica Laboratories, Inc.	
Client Contact	Work	Order	#			П		T												
Kinder Morgan Bulk Terminals: T5-Portland						;	ا ا										-		Analysis Turnaround Time	
15550 N Lombard Terminal 5		0.4				1000	ξ									1 1			Analysis Turnaround Time	
Portland, OR 97203		YW W	(031	4			<u>م</u> ا												1	
503-285-4200 Phone				1			2 8		را ا	۱									i I	
503-285-7733 FAX	Tempera	ture Upo		Fitered Sumple Cu, Pb, Zn Total ICPMS; Solids, TSS SM 2540D O&G 1664/9070 Total** FT-pH: \$\int\cdots \cdot \								j		10 DAY						
Client PM: Katrina Greene				3	<u>ē</u> ₹	70	2	늴							Ì					
Project Name: Stormwater		1 37							-	<u> </u>							ł			
Laboratory PM: Brian Cone									1	<u></u>			ı				l			
							င် မြ	3.16	핗	틸							Ì		1	
Sample Identification	Sample Date	Sample Time	Preservation Used	Matrix	# of Cont.	الج	S S	080	E	Zarl Carl									Sample Specific Notes:	
Outfall 001	11-10		1, 2, 4	Water		7	x x	X	X :	x			▝				-		*Analyze undiluted	
Outlan 001	<u>_</u>					廿	1			╅	† †			+			_	1	** Don't sub O&G	
						H	+	+	\vdash	+	++	+	+	+	+	+			25.1.545 54.5	
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				ļ		╟╫	+	\vdash	\vdash	+	┿	+		1-1		4		┿		
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5	S=NaOH: 6= Other																			
Special Instructions/QC Requirements & Comments:																			i	
Received by:	Company:	<u> </u>	·····	Date/Tir	ne:						1		_	Con	pany:				Date/Time:	
	1 ' -	ica Portlan		j	1-10-	o E)	O'	930	Ć	11	1 LA	NB:	1	ipaliy. t Amei	rica D	ortion	н	Date/Time: 17:10	
Lawrence Spanglek	I rest Amer	iva r Ultiali	<u> </u>											1168	· Ane	ica P	UI LICEL P	<u>-</u>	<u> </u>	

	res	stAmerica Sample i	Receipt Ch	ecklist	n.		Cooler (O(s):
Received by:	Unpacked by:	Logged-in by:	-	Work Order N		4	
(section A)	(section B)	. 1. 1		Client:	aw Mo	rgun	<u> </u>
Date: /////// 03	Date: ////////////////////////////////////	Date: _}/// <i>U/18</i>	•	Project: 5	ormivat	·CN	
Time: 17 10	Initials <u>: M</u> M	Initials:	-	,	Temperature out	of range:	
***ESI Clients (see Section Cooler Temperature (IR):		glass NA (oil/air samples	;, ESI client)	Digi #1 Digi #2 Temperature Bla	ank:	No ice ice Me	elted 1 Hours
A Custody Seals: (#			В		ple Status: rcled, see NOD)		
Signature: Y N Dated:_			Gen	eral:	_		
None	Recei	ved from:	1	Intact?	\sim	N	
Container Type:		TA Courier	<u> </u>	# Containers Match C	coc? Y	N	none given
#Cooler(s	s)	UPS	1	IDs Match COC?	\ \ \ /	N	
#Box(s)	•		 		1 /	111	
None (#Other:)	Fed Ex	,	Analyses Requested:	v		(
None (Woulet	Client		Cyanide Checked?	Y	N	(NA)
Coolant Type:		TDP		Correct Type & Prese	ervation?	N	
Gel Ice		DHL		Adequate Volume?	Y) N	
Loose Ice	.	SDS	1	•		/	
None	•	Mid-Valley	į	Within Hold Time?	\ Y /	N	
None		GS/TA	Vola	tiles/ Oil Quality:		(
Packing Material:		GS/Senvoy	, ve	OAs/ Syringes free of t	Headspace? Y	N (NA \
Bubble B	ags	Other:	1 1	B on COC? not p	provided Y	N	NA ∮
-	n Cubbies		l <u>Met</u> a	als:			
Peanuts				HNO3 Preserved?	(V)	N	NA
	Oth		į	Dissolved Metals Filt	tered? Y	N	MA
V None (Other:)		!	Dissolved Metals 1 in			(11)
*** <u>ESI Clients Only</u> :			FED EX/ UP	S: Was the trackin	g paper keepable?	YES	NO
Temperature Blank:	°C not provide	ed Digi: # 1 #2	If circ	led NO, what is the Tra	cking number?		
All preserved bo All preserved ac		NA (voas/soils/all unp.) e NOD) NA (voas/soils/all unp.)	FED EX	Goldstreak U	PS DHL	Othe	er:
		Project	Managers:				
Comments:							

PM Reviewed: (Initial/Date)



Sampling Documentation Form

Client: Kinder Morgan Bulk Terminals: T5-Po	ortland
Sampler: Lawrence Spangler	Data: 4 10 AR
Site: Outfall 001	Date: <u>/ι-៸٥ - οβ</u> Time: <u>ο93</u> Ο
Project: Stormwater	1 me
Sample Matrix:	0
© Water □ Soil □ HW	□ Chemical □ Drinking
Other:	
Sampling Method:	erob — Multi arob
□ Comp-Flow □ Comp-Time 🕏 G	Grab □ Multi-grab
Composite Sampling Equipment:	
□ ISCO #: Comp Samples/day:	Start time: Ston time:
Sampler calibration:	Start time Stop time
Sampler calibration:	
Grab Sampling Equipment:	
pt Dipper □ Bucket □ Coliwassa tube	Time: 09\$○
Dipper - Bucket - Bucket	Time.
Field Data:	
pH: 6.42 pH calibration-7.00 buffe	er reading: 7.04
Temp: Cond: CI2:	
Temp: Cond: Cl2: Flow-initial: Flow	·
Gallons/day:	W-IIIIai.
Camoris/day.	
Field Conditions:	
Weather: □ Sunny □ Partly cloudy	★ Cloudy □ Snowing
Rainfall: Heavy Continuous	
	T-31
Sample Characteristics:	
Color: Odor: TSS	S:
Sediment: Foam:	-
Observations and Comments:	

Revision #0 8/19/08



PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

ORELAP#: OR100021

March 30, 2009

Katrina Greene Kinder Morgan Bulk Terminals: T5-Portland 15550 N. Lombard Terminal 5 Portland, OR 97203

RE: Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 03/16/09 10:45. The following list is a summary of the Work Orders contained in this report, generated on 03/30/09 15:14.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	<u>ProjectNumber</u>
PSC0443	Stormwater	NA

TestAmerica Portland

el W. Amil



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

NA

Portland, OR 97203

15550 N. Lombard Terminal 5

Project Number: Project Manager:

Katrina Greene

Report Created:

03/30/09 15:14

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Outfall 001	PSC0443-01	Water	03/14/09 17:15	03/16/09 10:45
Culvert	PSC0443-02	Water	03/14/09 17:10	03/16/09 10:45

TestAmerica Portland

hull W. Amil

Darrell Auvil For Brian Cone, Industrial Services Manager



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Katrina Greene

Project Number: Project Manager:

NA

Report Created: 03/30/09 15:14

Oil and Grease Analysis per EPA Method 1664

TestAmerica Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-01	(Outfall 001)		_	Wa	iter		Sampled: 03/14/09 17:15				
Oil & Grease		EPA 1664	ND		4.76	mg/l	1x	9030895	03/27/09 15:00	03/30/09 07:55	

TestAmerica Portland

and W. Anil

Darrell Auvil For Brian Cone, Industrial Services Manager



THE LEADER IN ENVIRONMENTAL TESTING

PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: Project Manager:

NA Katrina Greene Report Created: 03/30/09 15:14

Total Metals per EPA 200 Series Methods

TestAmerica Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-01	(Outfall 001)			w	ater		Sam	pled: 03/14/	09 17:15		
Copper		EPA 200.8	0.00720		0.00200	mg/l	lx	9030564	03/18/09 11:28	03/21/09 05:46	
Lead		Ħ	0.00135		0.00100	H		n	н	n	
Zinc		n	0.261	*****	0.00500	*	"	"	n	Ħ	
PSC0443-02	(Culvert)			w	ater		Sam	pled: 03/14/	09 17:10		
Copper		EPA 200.8	0.0103	*****	0.00200	mg/l	1x	9030564	03/18/09 11:28	03/21/09 06:00	
Lead		•	0.00195		0.00100	н .	"		*	н	
Zinc		н	0.295		0.00500					,,	

TestAmerica Portland

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Darrell Auvil For Brian Cone, Industrial Services Manager



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

NA

Project Number: Project Manager:

Katrina Greene

Report Created:

03/30/09 15:14

Dissolved Metals per EPA 200 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-02 (Culvert)			W	ater		Sam	pled: 03/14/	09 17:10		
Copper	EPA 200.8	0.00535		0.00200	mg/l	1x	9030756	03/24/09 11:38	03/25/09 22:24	
Lead	**	ND		0.00100	**	"		п	H	
Zinc	11	0.107		0.00500	**	"	н	"	•	

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9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

Katrina Greene

15550 N. Lombard Terminal 5 Portland, OR 97203 Project Number: Project Manager: NA

Report Created:

03/30/09 15:14

Conventional Chemistry Parameters per Standard Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-01 (Outfall 001)	C0443-01 (Outfall 001)					Sampled: 03/14/09 17:15				
Total Suspended Solids	SM 2540D	20.0		10.0	mg/l	1x	9030578	03/18/09 14:00	03/18/09 17:34	

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Darrell Auvil For Brian Cone, Industrial Services Manager



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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: Project Manager: NA

Katrina Greene

Report Created: 03/30/09 15:14

Field Testing of Conventional Chemistry Parameters per APHA/EPA Methods

TestAmerica Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-01	(Outfall 001)			Wa	ter		Sam	pled: 03/14/	09 17:15		
рН		EPA 150.1	7.19	****		pH Units	łx	9030675	03/14/09 17:20	03/14/09 17:25	

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: Project Manager:

Katrina Greene

NA

Report Created: 03/30/09 15:14

Lab Filtration

TestAmerica Portland

Analyte	-	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSC0443-02	(Culvert)			Wa	iter		Sampled: 03/14/09 17:10				
Lab Filtration		NCA SOP	ND		1.00	N/A	1x	9030482	03/16/09 17:41	03/16/09 18:31	

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Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

15550 N. Lombard Terminal 5 Portland, OR 97203

Project Number: Project Manager: NA Katrina Greene

Report Created: 03/30/09 15:14

Oil and Grease Analysis per EPA Method 1664 - Laboratory Quality Control Results

			Т	estAmeric	a Portland	1						
QC Batch: 9030895	Water P	reparation M	lethod: O	&G prep	CE							
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike % Amt REC	(Limits) R	% (Limi PD	ts) Analyzed	Notes
Blank (9030895-BLK1)								Extracted:	03/27/09 14:15	1		
Oil & Grease	EPA 1664	ND		5.00	mg/l	Ix					03/30/09 07:55	
LCS (9030895-BS1)								Extracted:	03/27/09 14:15	<u>. </u>		
Oil & Grease	EPA 1664	35.9			mg/l	lx		40.1 89.5%	(78-114)		03/30/09 07:55	
Matrix Spike (9030895-MS1)				QC Source:	PSC0439-0)1		Extracted:	03/27/09 14:15			
Oil & Grease	EPA 1664	25.4			mg/l	lx	0.385	40.1 62.4%	(78-114)		03/30/09 07:55	М8
Matrix Spike Dup (9030895-MS	D1)			QC Source:	PSC0439-0	1		Extracted:	03/27/09 14:15			
Oil & Grease	EPA 1664	29.2			mg/l	lx	0.385	40.1 71.9%	(78-114) 1	3.9% (18)	03/30/09 07:55	М8

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Darrell Auvil For Brian Cone, Industrial Services Manager





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THE LEADER IN ENVIRONMENTAL TESTING

Test**A**merica

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: Project Manager:

Katrina Greene

Report Created: 03/30/09 15:14

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results TestAmerica Portland

			Т	estAmeric	a Portland	l	<u></u>			·.	_	., .,		· *
QC Batch: 9030564	Water P	reparation M	ethod: E	PA 200/30	05									
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030564-BLK1)								Extr	acted:	03/18/09 11	:28			
Copper	EPA 200.8	ND		0.00200	mg/l	1 x							03/21/09 03:50	
Lead	н	ND		0.00100	**	н							*	
Zinc	19	ND		0.00500	*	"							n	
LCS (9030564-BS1)								Extr	acted:	03/18/09 11	:28			
Copper	EPA 200.8	0.0968		0.00200	mg/l	lx		0.100	96.8%	(85-115)		(03/21/09 03:58	
Lead	n	0.0906		0.00100	*	"		"	90.6%	**			*	
Zinc	ři.	0.0866		0.00500	*	•		n	86.6%	*			Ħ	
Duplicate (9030564-DUP1)				QC Source:	PSC0426-	01		Extr	acted:	03/18/09 11	:28			
Copper	EPA 200.8	1.35		0.0100	mg/l	5x	1.43				5.48%	(20)	03/21/09 04:41	
Lead	*	ND		0.00500	н	"	ND				11.4%	н	n	
Zinc	n	0.0516		0.0250	**	*	0.0564				8.70%	"	n	
Matrix Spike (9030564-MS1)			_	QC Source:	PSC0426-	01		Extr	acted:	03/18/09 11	:28			
Соррег	EPA 200.8	1.51		0.0100	mg/l	5x	1.43	0.100	83.5%	(75-125)		-	03/21/09 04:48	
Lead	**	0.0922		0.00500	**	н	0.00370	*	88.6%	**			п	
Zinc		0.148		0.0250	н	"	0.0564	**	91.8%	(70-130)			v	
Matrix Spike (9030564-MS2)				QC Source:	PSC0443-)1		Extr	acted:	03/18/09 11	:28			ů.
Copper	EPA 200.8	0.0958		0.00200	mg/l	lx	0.00720	0.100	88.6%	(75-125)		(03/21/09 05:53	
Lead	**	0.0835		0.00100	"	**	0.00135	"	82.1%				*	
Zinc	n	0.338		0.00500			0.261	н	76.9%	(70-130)				

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Darrell Auvil For Brian Cone, Industrial Services Manager



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THE LEADER IN ENVIRONMENTAL TESTING

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

15550 N. Lombard Terminal 5 Portland, OR 97203

Project Number: Project Manager:

Katrina Greene

Report Created: 03/30/09 15:14

	Dissolved I	Metals per E		eries Metl estAmeric			tory Qua	lity Co	ntrol	Results				
QC Batch: 9030756	Water F	reparation M	lethod: E	PA 200/30	05 Diss									
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030756-BLK1)								Extr	acted:	03/24/09 11	:38			
Copper	EPA 200.8	ND		0.00200	mg/l	١x							03/25/09 22:13	
Lead	н	ND	•••	0.00100	**								**	
inc	n	ND		0.00500		*							u	
LCS (9030756-BS1)								Extr	acted:	03/24/09 11	1:38			_
Соррет	EPA 200.8	0.0943		0.00200	mg/l	lx		0.100	94.3%	(85-115)			03/25/09 22:19	
ead		0.103		0.00100	*	**		н	103%	*			•	
Cinc	н	0.101		0.00500	•	"		*	101%	*			11	
Duplicate (9030756-DUP1)				QC Source:	PSC0443-)2		Extr	acted:	03/24/09 11	:38			
Copper	EPA 200.8	0.00530		0.00200	mg/l	lx	0.00535				0.845%	6 (20)	03/25/09 22:29	
Lead	•	ND		0.00100		*	ND				NR	H	**	
Cinc	10	0.106		0.00500	*	"	0.107				1.22%	, "	"	
Matrix <u>Spike</u> (9030756-MS1)				QC Source:	PSC0444-4	01	_	Extr	acted:	03/24/09 11	:38			
Copper	EPA 200.8	0.103		0.00200	mg/l	lx	0.0106	0.100	92.1%	(70-130)	-		03/25/09 22:45	
ead	**	0.101		0.00100	•	**	0.000935	н	99.7%	**			н	
Zinc	•	0.208		0.00500			0.109	"	98.8%				**	
Matrix Spike (9030756-MS2)				QC Source:	PSC0573-4)2	_	Extr	acted:	03/24/09 11	:38			
Copper	EPA 200.8	0.110		0.00200	mg/l	1x	0.0200	0.100	90.4%	(70-130)			03/25/09 23:50	
ead	•	0.100		0.00100	H	•	0.000243	"	99.7%				**	
Zinc		0.645		0.00500	**		0.553		92.1%	**				

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Darrell Auvil For Brian Cone, Industrial Services Manager



THE LEADER IN ENVIRONMENTAL TESTING

PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

Stormwater

15550 N. Lombard Terminal 5

Project Name: Project Number:

NA

Report Created:

Portland, OR 97203

Project Manager: Katrina Greene 03/30/09 15:14

C	onventional Che	mistry Para	"		r d Metho a Portland	•	Laborato	ry Quality	Control Res	ults		
QC Batch: 9030578	Water P	reparation M	lethod: G	eneral Pre	paration							
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike % Amt REC	(Limits) RI		ts) Analyzed	Notes
Blank (9030578-BLK1)								Extracted:	03/18/09 14:00			
Total Suspended Solids	SM 2540D	ND		10.0	mg/l	lx					03/18/09 17:34	
LCS (9030578-BS1)								Extracted:	03/18/09 14:00			
Total Suspended Solids	SM 2540D	50.0		10.0	mg/l	1x		50.0 100%	(80-120)		03/18/09 17:34	
Duplicate (9030578-DUP1)		_		QC Source:	PSC0445-01	i		Extracted:	03/18/09 14:00			
Total Suspended Solids	SM 2540D	ND		10.0	mg/l	lx	ND			NR (20)	03/18/09 17:34	

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Darrell Auvil For Brian Cone, Industrial Services Manager



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

15550 N. Lombard Terminal 5

Project Number:

NA

Report Created:

Portland, OR 97203

Project Manager:

Katrina Greene

03/30/09 15:14

		Lab Fi	ltration -	Laborat	ory Qua	lity Co	ntrol Res	ults				n er grindige. Walanzaga	the same technical	
				estAmeric										
QC Batch: 9030482	Water F	reparation N	1ethod: La	ıb Filter										
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9030482-BLK1)								Extr	acted:	03/16/09 1	7:41			
Lab Filtration	NCA SOP	ND		1.00	N/A	lx					_	(03/16/09 18:31	

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Darrell Auvil For Brian Cone, Industrial Services Manager



THE LEADER IN ENVIRONMENTAL TESTING

PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

NA

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Number: Project Manager:

Katrina Greene

Report Created: 03/30/09 15:14

Notes and Definitions

Report Specific Notes:

M8 The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).

Laboratory Reporting Conventions:

Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only. DET

ND Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).

NR/NA Not Reported / Not Available

Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight. dry

Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported wet

on a Wet Weight Basis.

RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries). **RPD**

METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table. MRL

METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. MDL* *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.

Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.

Reporting -Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and Limits

percent solids, where applicable.

Electronic Signature

Dil

- Electronic Signature added in accordance with TestAmerica's Electronic Reporting and Electronic Signatures Policy. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory.

Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Darrell Auvil For Brian Cone, Industrial Services Manager

TestAmerica Portland

9405 SW Nimbus Avenue

Chain of Custody Record



Beaverton, OR 97008

phone 503,906,9200 fax 503,906,9210 TestAmerica Laboratories, Inc. Work Order # Client Contact Kinder Morgan Bulk Terminals. T5-Portland Zn Total ICPMS 200.8* **Analysis Turnaround Time** PSC0443 15550 N Lombard Terminal 5 Portland, OR 97203 503-285-4200 Phone Sampling Event-Grab Temperature Upon Receipt: 10 DAY 503-285-7733 FAX Client PM: Katrina Greene Project Name: Stormwater OK Laboratory PM: Brian Cone Sample Sample Time Cont. Sample Identification Matrix Sample Specific Notes: $\mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x} \mathbf{x}$ 03.44 *Analyze undiluted 1, 2, 4 Water 1715 Outfall 001 CUlVert ** Don't sub O&G 0324 1710 1,4 witer Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other_ Special Instructions/QC Requirements & Comments: Date/Time: Received by: Date/Time: Company: IN LAB: 1045 1715 03-16-09 03-44-09 Test America Portland Lawrence Spangler -Test America Portland



Sampling Documentation Form

		ulk Terminals: T5-	Portland		
Sampler: La Site: Outfall	wrence Spai	ngier	Date [.]	03-14-09	
Project: Sto			Time:	1705	
1 TOJECE. OLO	inwater				
Sample Ma	trix:				
		o HW ==	Chemical Dr	inking	
			1,2,0		
Sampling N Grab	neuroa.				
Grab Samp	ling Equipm	ent:			
Dipper	Time:	710 , 1715			
Field Data: pH:7.0	g pH o	calibration-7.00 bucalibration slope:	ffer reading:	7. 05	
Field Cond					
Weather:	□ Sunny	□ Partly cloudy	★Cloudy	□ Snowing	
Weather: Rainfall:	□ Sunny □ Heavy	□ Partly cloudy		□ Snowing nt≱ Light	□ None
Rainfall: Sample Ch	□ Heavy aracteristics	☆ Continuous	□ Intermitte	□ Snowing nt≱ Light	□ None
Rainfall: Sample Ch	□ Heavy aracteristics	☆ Continuous	□ Intermitte	□ Snowing nt≱ Light	□ None
Rainfall: Sample Ch	□ Heavy aracteristics	▼ Continuous	□ Intermitte	□ Snowing nt≱ Light	□ None
Rainfall: Sample Ch Color: Sediment:	□ Heavy aracteristics Odo		□ Intermitte	□ Snowing	□ None
Rainfall: Sample Ch Color: Sediment:	□ Heavy aracteristics		□ Intermitte	□ Snowing	□ None
Rainfall: Sample Ch Color: Sediment:	□ Heavy aracteristics Odo		□ Intermitte	□ Snowing	□ None
Rainfall: Sample Ch Color: Sediment:	□ Heavy aracteristics Odo		□ Intermitte	□ Snowing	□ None
Rainfall: Sample Ch Color: Sediment:	□ Heavy aracteristics Odo		□ Intermitte	□ Snowing	□ None
Rainfall: Sample Ch Color: Sediment:	□ Heavy aracteristics Odo		□ Intermitte	□ Snowing	□ None
Rainfall: Sample Ch Color: Sediment:	□ Heavy aracteristics Odo		□ Intermitte	□ Snowing	□ None

Revision #0 8/19/08

TestAmerica Portland Sample Receiving Checklist

Wor	k Ord	er #: PSC 0443 Date/Time Received: 03-16-09 1045
		me and Project: Kinder Moran Stormwaree
Resid Quote	ual Ch :#:	plete This Section: Yes No Yes No lorine Check Required:
	Zone: DT/EST	CDT/CST MDT/MST PDT/PST OTHER
Co	oler #(: erature	Temperature out of Range: Solve
N/A	Yes	No Initials:
X		1. If ESI client, were temp blanks received? If no, document on NOD.
X		2. Cooler Seals intact? (N/A if hand delivered) if no, document on NOD.
	X	3. Chain of Custody present? If no, document on NOD.
	X	4. Bottles received intact? If no, document on NOD.
	K	5. Sample is not multiphasic? If no, document on NOD.
	Ø	6. Proper Container and preservatives used? If no, document on NOD.
	Ø	7. pH of all samples checked and meet requirements? If no, document on NOD.
X		8. Cyanide samples checked for sulfides and meet requirements? If no, notify PM.
X		9. HF Dilution required?
	X	10. Sufficient volume provided for all analysis? If no, document on NOD and consult
	X	PM before proceeding. 11. Did chain of custody agree with samples received? If no, document on NOD.
		12. Were VOA/Oil Syringe samples without headspace?
X		13. Were VOA vials preserved? HCL Sodium Thiosulfate Ascorbic Acid
		14. Did samples require preservation with sodium thiosulfate?
区		15. If yes to #14, was the residual chlorine test negative? If no, document on NOD.
	X	16. Are dissolved/field filtered metals bottles sediment-free? If no, document on NOD.
		17. Is sufficient volume provided for client requested MS/MSD or matrix duplicates? If no. document on NOD and contact PM before proceeding.
\Box X		18. Are analyses with short holding times received in hold?
	X	19. Was Standard Turn Around (TAT) requested?
	X	20. Receipt date(s) < 48 hours past the collection date(s)? If no, notify PM.

F:\Sample_Receiving\Receiving_Documents\Forms (effective 3/16/09)

TestAmerica Portland Sample Receiving Checklist

Work Order #: PSC0443

Log	in Ch	ks: Initials:	
N/A	Yes	0	
	X	21. Sufficient volume provided for all analysis? If no, document on NOD & contact P	Μ.
abla		22. Sufficient volume provided for client requested MS/MSD or matrix duplicates? If	•
, ,		no, document on NOD and contact PM.	
	Ø	23. Did the chain of custody include "received by" and "relinquished by" signatures,	
	/ •	dates and times?	
	X	24. Were special log in instructions read and followed?	
	X	25. Were tests logged checked against the COC?	
	X	26. Were rush notices printed and delivered?	
×		27. Were short hold notices printed and delivered?	
X		28. Were subcontract COCs printed?	
X		29. Was HF dilution logged?	•
Lah	elina	d Storage Checks: Initials:	
	Yes	o Storage cheeks.	
N/A	res	30. Were the subcontracted samples/containers put in Sx fridge?	
L.J.	₩	31. Were sample bottles and COC double checked for dissolved/filtered metals?	
L_)	120	32. Did the sample ID, Date, and Time from label match what was logged?	
πi	[33. Were Foreign sample stickers affixed to each container and containers stored in	
4		foreign fridge?	
4		34. Were HF stickers affixed to each container, and containers stored in Sx fridge?	
Doc"	لــا ment a	problems or discrepancies and the actions taken to resolve them on a Notice of Discrepan	Ċν
	(NOD)	problems of disoropanoies and the actions taken to resorve dient on a reduce of Disoropan	~,

F: Sample_Receiving\Receiving_Documents\Forms (effective 3/16/09)



PORTLAND, OR 9405 S.W. NIMBUS AVENUE ph: (503) 906.9200 fax: (503) 906.9210

ORELAP#: OR100021

February 17, 2009

Katrina Greene Kinder Morgan Bulk Terminals: T5-Portland 15550 N. Lombard Terminal 5 Portland, OR 97203

RE: Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 02/11/09 13:45. The following list is a summary of the Work Orders contained in this report, generated on 02/17/09 16:22.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	<u>ProjectNumber</u>
PSB0312	Stormwater	NA

TestAmerica Portland

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name: Project Number: Stormwater

Project Manager:

Katrina Greene

NA

Report Created:

02/17/09 16:22

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Outfall 001	PSB0312-01	Water	02/10/09 13:30	02/11/09 13:45
Pond	PSB0312-02	Water	02/10/09 13:45	02/11/09 13:45
Culvent	PSB0312-03	Water	02/10/09 13:25	02/11/09 13:45

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9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: NA
Project Manager: Kats

Katrina Greene

Report Created:

02/17/09 16:22

Oil and Grease Analysis per EPA Method 1664

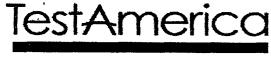
TestAmerica Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes		
PSB0312-01	(Outfall 001)			Water Sampled: 02/10/09 13:30									
Oil & Grease		EPA 1664	ND		2.36	mg/l	1x	9020400	02/12/09 15:17	02/16/09 20:11			

TestAmerica Portland

Bean L Come

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.



9405 S.W. NIMBUS AVENUE

BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: Project Manager:

Katrina Greene

NA

Report Created: 02/17/09 16:22

Total Metals per EPA 200 Series Methods

TestAmerica Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSB0312-01	(Outfall 001)			W	ater		Sam	pled: 02/10/	09 13:30		
Соррег		EPA 200.8	ND		0.00200	mg/l	ĺχ	9020373	02/12/09 09:12	02/13/09 00:05	
Lead		•	ND		0.00100		•	•	•	•	
Zinc		•	0.209		0.00500	•	• .	•	•	•	
PSB0312-02	(Pond)			W	ater		Sam	pled: 02/10/			
Zinc		EPA 200.8	ND	_	0.00500	тд∕1	lx	9020373	02/12/09 09:12	02/13/09 00:12	
PSB0312-03	(Culvent)			W	ater		Sam	pled: 02/10/			
Zinc		EPA 200.8	4.31		0.0500	mg/l	10x	9020373	02/12/09 09:12	02/13/09 00:55	

TestAmerica Portland

Brean L Come

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.



PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Project Name: Project Manager: Stormwater

Portland, OR 97203

Project Number:

NA Katrina Greene

Report Created: 02/17/09 16:22

Field Testing of Conventional Chemistry Parameters per APHA/EPA Methods

TestAmerica Portland

Analyte		Method	Result	MDL+	MRL	Units	Dil	Batch	Prepared	Anaiyzed	Notes
PSB0312-01	(Outfall 001)		Wa	ter		Sam	pled: 02/10/	09 13:30			
рН		EPA 150.1	6.86			pH Units	1x	9020389	02/10/09 13:35	02/10/09 13:40	

TestAmerica Portland

Been L Come

Brian Cone, Industrial Services Manager

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9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 Fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Project Manager:

Stormwater

Project Number: N

NA Katrina Greene Report Created:

02/17/09 16:22

Oil and Grease Analysis per EPA Method 1664 - Laboratory Quality Control Results

			T	estAmeric	a Portland								
QC Batch: 9020400	Water P	reparation M	lethod: O	&G prep	CE	we -							
Analyte	Method	Result	MDL+	MRL	Units	Dil	Source Result	Spike % Amt RE	(Limits)	% RPD	(Limit	s) Analyzed	Notes
Blank (9020400-BLK1)								Extracted	: 02/12/09 1	5:17			
Oil & Grease	EPA 1664	ND	_	5.00	mē\I	lx			-	-	-	02/16/09 16:45	
LCS (9020400-BS1)								Extracted	: 62/12/09 1	5:17			
Oil & Grease	EPA 1664	35.8			mg/l	1x	_	40,0 89.5	% (78-114)	_	-	02/16/09 16:45	
Matrix Spike (9020400-MS1)				QC Source:	PSB0128-04	4		Extracted	: 02/12/09 1:	5:17			
Oil & Grease	EPA 1664	24.4	-		mg/l	lx	0.490	40.0 59.8	% (78-114)	-	-	02/16/09 16:45	М
Matrix Spike Dup (9020400-M	SD1)			QC Source:	PSB0128-0-	4		Extracted	: 02/12/09 1:	5:17			
Oil & Grease	EPA 1664	31.6			mg/l	1x	0.490	40.0 77.8	% (78-114)	25.7%	6 (18)	02/16/09 16:45	M

TestAmerica Portland

Boom L Come

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.



Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Project Name: Stormwater

Project Number: NA

Project Manager: Katrina Greene

Report Created: 02/17/09 16:22

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

	I otal ivic	<u>.</u>	: Т	estAmerica	Portland									
QC Batch: 9020373	Water P	reparation M	ethod: E	PA 200/30	35									
Analyte	Metkod	Result	MDL*	MRL	Units	Dii	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9020373-BLK1)								Extr	acted:	02/12/09 09	:12			
Соррег	EPA 200,8	ND		0.00200	mg/l	ix			-	-		- (02/12/09 20:57	
Lead		ND	_	00100.0	•	•					-	-	•	
Zinc	•	ND	-	0.00500	•	•		-	-	-	-	-	•	
LCS (9020373-BS1)								Extr	acted:	02/1 2/0 9 09	:12			
Copper	EPA 200.8	0.101	_	0.00200	rng/l	lx	-	0.100	101%	(85-115)	_	_	02/12/09 21:04	
Lead	•	0.0980		0.00100		•	_	*	98.0%		-	-	•	
Zinc	•	0.0983		0.00500	•	•	-	•	98.3%	•	-	-	.**	
Duplicate (9020373-DUP1)				QC Source:	PSB0162-4	16		Extr	actod:	02/12/09 09	:12			
Соррег	EPA 200.8	ND		0.00200	mg/l	ĺx	ND	-	-	_	NR	(20)	02/12/09 21:19	
Lead	*	ND		0.00100	я		ND	_	-	-	9.93%	•		
Zinc	*	ND		0.00500			ND	-	-	-	0.434%	•	•	
Matrix Spike (9020373-MS1)				QC Source:	PSB0204-0	и .		Extr	acted:	02/12/09 0 9	:12			
Copper	EPA 200.8	0.0960		0.00200	mg/l	1x	0.000680	0.100	95.3%	(75-125)	-	_	02/12/09 21:48	
Lead		0.0964	_	0.00100		*	ND	•	96.4%	•		-	•	
Zinc	•	0.100	_	0.00500	•	•	0.00257	W	97.8%	(70-130)	-	-	•	
Matrix Spike (9020373-MS2)				QC Source:	PSB0207-)2		Extr	acted:	02/12/09 0 9	:12			
Copper	EPA 200.8	1.02		0.0200	mg/l	10x	0.906	0.100	114%	(75-125)	-		02/13/09 00:48	
Lead		0.0891		0.00100		1x	0.00559	•	83.5%	*	-	-	02/12/09 22:31	
Zinc		2.85		0.0500	*	10x	2.69		159%	(70-130)			02/13/09 00:48	ME

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9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 Fax: (503) 906.9210

Kinder Morgan Bolk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Project Manager:

Stormwater

Project Number: NA

Katrina Greene

Report Created: 02/17/09 16:22

Notes and Definitions

Report Specific Notes:

M8

The MS and/or MSD were below the acceptance limits. See Blank Spike (LCS).

MHA

Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).

Laboratory Reporting Conventions:

DET Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.

ND Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).

NR/NA _ Not Reported / Not Available

Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight. dry

Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported wet

on a Wet Weight Basis.

RPD RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).

MRL METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.

METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. MDL* *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported

as Estimated Results.

Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution Dil

found on the analytical raw data.

Reporting -Limits

Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.

Electronic Signature

Electronic Signature added in accordance with TestAmerica's Electronic Reporting and Electronic Signatures Policy. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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Bren L Come

The results in this report apply to the samples analyced in accordance with the chain of custody document. This analytical report shall not be reproduced except in full. hout the written approval of the labo

TestAmerica Portland

9405 SW Nimbus Avenue

Chain of Custody Record



Beaverton, OR 97008

phone 503,906,9200 Tax 503,906,9210																				TestAmerica Labor	atories, inc.
Client Contact	Work	Order :	#			П			П						Т	П	T				
Kinder Morgan Bulk Terminals: T5-Portland	l						ا ي				1 1		} }	1	1]]	- [1		Analysis Turna	round Time
15550 N Lombard Terminal 5	م ا	^					2002							ſ		11		1		Amarysis i arma	nvana time
Portland, OR 97203	ע נ	SRA	3/2)			Z	1.			1 1]									
503-285-4200 Phone	1		1014					늘	1	ام				-	ı		-			3	
503-285-7733 FAX	Tempera	ture Upo	n Receipt:				SM 2540D	를		띩	1 1		i I	ı					lí	10 D/	AY
Client PM: Katrina Greene	1		. ~					18		된	1 1	- [- (1	Ų	1		_	
Project Name: Stormwater	1		1.2	Ċ			2 2	8	8	2		- 1			1						
Laboratory PM: Brian Cone			ميتد دا			H,	5 2	3	4	6					ļ						
Sample identification	Sample Date	Sample Time	Preservation L'ace	Matrix	# of Cont.	Fiftered Se	Solids, TSS SM 2540D	0&G 16	FT-pH: 6.86	Sampling Event-Grab										Sample Speci	fic Notes:
Outfall 001	02/10	1330	1, 2, 4	Water	4	П	x x	X	Х	x						П				*Analyze u	ndiluted
pand	2110	1340		8	1	П)	4									** Don't su	ıb O&G
(ulvent	2110	1324		2	1					/						П	T	T			
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		····				11	_	1	П		\top	1	T	1	+	11	\top	T			
						ff		T	П		\top	\top	\top	_	\top	T	1	1	П		
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaO	H; 6= Other			<u></u>		11										11	<u>.</u> .				
Special Instructions/QC Requirements & Comments:																					
	•																				
Received by:	Company:			Date/Tit							1	NI I	AB	.	ompa	ny:				Date/Time: 62 - 11-09 (9/-
Lawrence Spangler	Test Amer	ica Portlan	d	20	16-	UT		34	1			14 F	-~D	· 1	est A	meric	a Po	tland		02-11-01	345

	TestAmerica Sample F	Receipt Checklist	•
Received by: Unpacked by:	Logged-in by:	Work Order No. 1880312	
'(section A) '(section B) , 1	11	client: Kindler Morgan	
Date: 02-1107 Date: 211100	1 Date: 211109	Project: Stormwater	
Time: (६५८ Initials: 15)	Initials:	Temperature out of range.	
Initials:	U^*	Not enough Ice	
***ESI Clients (see Section C)		No ice ice Atelled	
		Digi #1Wilii 4 Hours Digi #2Other:	
Cooler Temperature (IR): 1,2 C plan	stic glass NA (oll/air samples	es, ESI client) Temperature Blank:C	
A Custody Seals: (#)		B Sample Status: (If N circled, see NOD)	
Signature: Y N Dated:	Density of frame	General:	
None	Received from:	Intact? Y N	
Container Type:	X TA Courier	# Containers Match COC? Y N none given	
<u></u> #Cooler(s)	Sепчоу		
#Box(s)	UPS	IDs Match COC?	
None (#Other:	Fed Ex	For Analyses Requested:	
None Potner	Cllent	Cyanide Checked? Y N NA	
Coolant Type:	TDP	Correct Type & Preservation? Y N	
Gel Ice	DHL	Adequate Volume? Y N	
	sds	Within Hold Time?	
None	Mid-Valley	HF Dilution Required?	
- 177 .	GS/TA	Volatiles/ Oil Quality:	
Packing Material:	GS/Senvoy	VOAs/ Syringes free of Headspace? Y N NA	
Bubble Bags	Other:	TB on COC? not provided Y N NA	
Styrofoam Cubbles		Metals:	
Peanuts		HNO3 Preserved? Y N NA	
None (Other:)	Dissolved Metals Filtered? Y N N	
C ***ESI Clients Only:		FED EX/ UPS: Was the tracking paper keepable? YES NO	
Temperature Blank:*C not	provided Digi: # 1 #2	If circled NO, what is the Tracking number?	-
All preserved bottles checked Y All preserved accordingly? Y	N NA (voas/soils/all unp.) N (see NOD) NA (voas/soils/all unp.)	FED EX Goldstreak UPS DHL Other	_
	Project	t Managers:	
Comments:	PM Reviewed:	(Initial/Date)	-



Sampling Documentation Form

Client Kind						
Onene (dia	er Morgan Bu	ılk Terminals: T	5-Portlan	ıd		
Sampler: La	wrence Span	gler			~	
Site: Outfall	001			Date: _	0210-04	
Project: Stor	mwater			Time:	1330	
Sample Mat	rix:		-			
		□ HW	□ Chemi	cal ⊓ Dr	inkina	ļ
vac.	L 0011					
Sampling M	lethod:				·	
Grab	104.04.					
Oldo						
Grah Samp	ling Equipme	ant				
Dipper	Time:/	3 5C:	oon dist	5 ruly	ert 1325	
D.PPC.	11.110.		<u> </u>			
Field Data:			·····			,
pH: 6.8k		alibration-7.00 l	huffer rea	idina.	7.05	
рп	pi v	MDIGUOTI 7.00.	<u> </u>	<u></u>		
Field Condi	tions:					
Weather:	□ Sunny	□ Partly cloud	dv &	Cloudy	□ Snowing	
D-:6-11.	or Heavy	x Continuous	3 0	Intermitte	ento Light	□ None
Raimaii:	AIICHT		-			
Raimaii.	μ. i.cury					
	aracteristics:	·				
Sample Cha	aracteristics:					
Sample Cha	aracteristics:					
Sample Cha	aracteristics:					
Sample Cha Color: Sediment:	aracteristics:	:Foam:				
Sample Cha Color: Sediment:	aracteristics: Odor	:Foam:				
Sample Cha Color: Sediment:	aracteristics: Odor	:Foam:				
Sample Cha Color: Sediment:	aracteristics: Odor	:Foam:				
Sample Cha Color: Sediment:	aracteristics: Odor	:Foam:				
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Sample Cha Color: Sediment:	aracteristics: Odor	:Foam:				
Sample Cha Color: Sediment:	aracteristics: Odor	:Foam:				

Revision #0 8/19/08



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

ORELAP#: OR100021

January 03, 2009

Katrina Greene Kinder Morgan Bulk Terminals: T5-Portland 15550 N. Lombard Terminal 5 Portland, OR 97203

RE: Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 12/15/08 13:45. The following list is a summary of the Work Orders contained in this report, generated on 01/03/09 16:03.

If you have any questions concerning this report, please feel free to contact me.

Work Order	<u>Project</u>	ProjectNumber	
PRL0504	Stormwater	NA	

TestAmerica Portland

Bean L Come

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9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Katrina Greene

Project Number: Project Manager: NA

Report Created: 01/03/09 16:03

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Outfall 001	PRL0504-01	Water	12/12/08 16:10	12/15/08 13:45

TestAmerica Portland

Been L Come

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: Project Manager: NA

Katrina Greene

Report Created: 01/03/09 16:03

Oil and Grease Analysis per EPA Method 1664

TestAmerica Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRL0504-01	(Outfall 001)		-	Wa	iter		Sam	pled: 12/12/	08 16:10		
Oil & Grease		EPA 1664	ND		2.36	mg/l	1x	8120852	12/31/08 16:45	01/01/09 15:50	

TestAmerica Portland

Brean L. Come

Brian Cone, Industrial Services Manager

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THE LEADER IN ENVIRONMENTAL TESTING

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name: Project Number: Stormwater

Project Manager:

Katrina Greene

NA

Report Created: 01/03/09 16:03

Total Metals per EPA 200 Series Methods

TestAmerica Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRL0504-01	(Outfall 001)			W	ater		Sam	pled: 12/12/	08 16:10	****	
Copper		EPA 200.8	0.0188		0.00200	mg/l	1x	8120644	12/18/08 14:05	12/19/08 01:20	
Lead		**	0.00570		0.00100		*	"	•	H	
Zinc		P1	1.02		0.0500	"	10x	•	**	12/19/08 15:32	

TestAmerica Portland

Brean L Come

Brian Cone, Industrial Services Manager

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9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5 Portland, OR 97203 Project Name:

Stormwater

Project Number: Project Manager:

Katrina Greene

NA

Report Created: 01/03/09 16:03

Conventional Chemistry Parameters per Standard Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRL0504-01 (Outfa	ll 001)		Wa	iter		Sam	pled: 12/12/	08 16:10		
Total Suspended Solids	SM 2540D	64.0		4.00	mg/l	lx	8120673	12/19/08 11:02	12/19/08 13:15	

TestAmerica Portland

Brean L. Come

Brian Cone, Industrial Services Manager

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9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

THE LEADER IN ENVIRONMENTAL TESTING

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

NA

Project Number: Project Manager:

Katrina Greene

Report Created:

01/03/09 16:03

Field Testing of Conventional Chemistry Parameters per APHA/EPA Methods

TestAmerica Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRL0504-01	(Outfall 001)			Wa	iter		Sam	pled: 12/12/	08 16:10		
pН	<u> </u>	EPA 150.1	6.48			pH Units	lx	8120597	12/12/08 16:15	12/12/08 16:20	

TestAmerica Portland

Burn L Come

Brian Cone, Industrial Services Manager

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.



PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

Stormwater Project Name:

15550 N. Lombard Terminal 5

Project Number:

NA

Report Created:

Portland, OR 97203

Project Manager:

Katrina Greene

01/03/09 16:03

	Oil and Gro	ease Analysi		Method estAmeric		4.4		ality Co	ontro	Result				
QC Batch: 8120852	Water F	reparation M	lethod: O	&G prep	CE									
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)) Analyzed	Notes
Blank (8120852-BLK1)								Extr	acted:	12/31/08 14	1:00			
Oil & Grease	EPA 1664	ND		5.00	mg/l	lx					-		01/01/09 15:50	
LCS (8120852-BS1)	_							Extr	acted:	12/31/08 14	1:00			
Oil & Grease	EPA 1664	35.1	***		mg/l	lx	-	40.0	87.8%	(78-114)	-		01/01/09 15:50	
Matrix Spike (8120852-MS1)				QC Source:	PRL0495	-01		Extr	acted:	12/31/08 14	1:00			
Oil & Grease	EPA 1664	34.3			mg/l	lx	1.62	40.0	81.7%	(78-114)	-		01/01/09 15:50	
Matrix Spike (8120852-MS2)				QC Source:	PRL0527-	-01		Extr	acted:	12/31/08 14	1:00			
Oil & Grease	EPA 1664	29.4			mg/l	lx	23.6	40.0	14.5%	(78-114)			01/01/09 15:50	МНА

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Becan L Come

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OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132

ph: (503) 906.9200 fax: (503) 906.9210



THE LEADER IN ENVIRONMENTAL TESTING

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

15550 N. Lombard Terminal 5 Portland, OR 97203 Project Number: Project Manager:

Katrina Greene

NA

Report Created: 01/03/09 16:03

	Total Me	etals per EPA		es Metho estAmeric			ry Qualit	y Cont	rol R	esults				
QC Batch: 8120644	Water F	reparation M	ethod: E	PA 200/30	05									
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (8120644-BLK1)			-					Extr	acted:	12/18/08 14	:05			
Copper	EPA 200.8	ND		0.00200	mg/l	1x				-			12/18/08 23:56	
Lead	"	ND		0.00100		**							"	
Zinc	"	ND		0.00500	"	**							*	
LCS (8120644-BS1)								Extr	acted:	12/18/08 14	:05			
Copper	EPA 200.8	0.0970		0.00200	mg/l	1x		0.100	97.0%	(85-115)			12/19/08 00:01	
.ead	n	0.0902		0.00100		"			90.2%	17			**	
Zinc		0.0938		0.00500	"	*			93.8%	"			*	
Duplicate (8120644-DUP1)				QC Source:	PRL0496-	01		Extr	acted:	12/18/08 14	:05			
Copper	EPA 200.8	ND		0.00200	mg/l	1x	ND		_		5.88%	(20)	12/19/08 00:12	
ead	"	ND		0.00100		*	ND				4.51%	**	*	
Zinc	н	ND		0.00500	*	*	ND	-			2.22%	n	а	
Matrix Spike (8120644-MS1)				QC Source:	PRL0496-	02		Extr	acted:	12/18/08 14	:05			
Copper	EPA 200.8	0.0980		0.00200	mg/l	1 x	0.00201	0.100	96.0%	(75-125)			12/19/08 00:22	
Lead	"	0.0875		0.00100	*	*	0.000284	"	87.2%				*	
Zinc	n	0.0972		0.00500	o	H	0.00241		94.8%	(70-130)			n	
Matrix Spike (8120644-MS2)				QC Source:	PRL0504-	01		Extr	acted:	12/18/08 14	:05			
Copper	EPA 200.8	0.112		0.00200	mg/l	1x	0.0188	0.100	93.0%	(75-125)			12/19/08 01:25	
Lead	n	0.0886		0.00100	н	*	0.00570	**	82.9%	**			7	
Zinc		1.11		0.0500	**	10x	1.02		87.0%	(70-130)			12/19/08 15:38	

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Brian Cone, Industrial Services Manager

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

15550 N. Lombard Terminal 5 Portland, OR 97203

Project Number: Project Manager: NA Katrina Greene

Report Created: 01/03/09 16:03

Conventional Chemistry Parameters per Standard Methods - Laboratory Quality Control Results

A STATE OF THE STA		. *-	т	estAmeric	a Portland	1						.5
QC Batch: 8120673	Water P	reparation M	lethod: G	eneral Pro	paration							
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike % Amt REC	(Limits) %	(Limits	s) Analyzed	Notes
Blank (8120673-BLK1)								Extracted:	12/19/08 11:02			
Total Suspended Solids	SM 2540D	ND		10.0	mg/l	lx					12/19/08 13:15	
LCS (8120673-BS1)								Extracted:	12/19/08 11:02			
Total Suspended Solids	SM 2540D	50.0		10.0	mg/l	1x		50.0 100%	(80-120)		12/19/08 13:15	
Duplicate (8120673-DUP1)				QC Source:	PRL0584-	DI		Extracted:	12/19/08 11:02			
Total Suspended Solids	SM 2540D	20.0		10.0	mg/l	1x	20.0		0.0	0% (20)	12/19/08 13:15	

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Brian Cone, Industrial Services Manager

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PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

15550 N. Lombard Terminal 5

Project Number:

NΑ Katrina Greene

Report Created: 01/03/09 16:03

Notes and Definitions

Project Manager:

Report Specific Notes:

Portland, OR 97203

MHA

Due to high levels of analyte in the sample, the MS/MSD calculation does not provide useful spike recovery information. See Blank Spike (LCS).

Laboratory Reporting Conventions:

Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.

Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate). ND

NR/NA _ Not Reported / Not Available

dry Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.

Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported wet

on a Wet Weight Basis.

RPD RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).

MRL METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.

MDL* METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.

Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution

found on the analytical raw data.

Reporting -Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and Limits

percent solids, where applicable.

Electronic Signature

Dil

Electronic Signature added in accordance with TestAmerica's Electronic Reporting and Electronic Signatures Policy. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory.

Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

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TestAmerica Portland

9405 SW Nimbus Avenue

Chain of Custody Record



Beaverton, OR 97008

phone 503.906.9200 fax 503.906.9210																			TestAmeric	a Labora	tories, Inc.
Client Contact	Work	Order	‡			П			I					\Box							
Kinder Morgan Bulk Terminals: T5-Portland]					ا	ا	1	1 1		1 1					1			Analysi	s Turnar	ound Time
15550 N Lombard Terminal 5	1					900	٤	1	1									1	Anaryst	, . ua.	odila Filit
Portland, OR 97203	1					֓֞֟֝֟֝֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֓֟֟֓֓֓֓֟֟֓֓֓֓֟֟֓֓֓֟֓֓֓֟֓֓֓֟֓֓֓֟֓֓֓֟֓֓֓֓	7														
503-285-4200 Phone						Total ICBMS		<u>=</u>		ام					1			-			
503-285-7733 FAX	Tempera	ture Upo	n Receipt:			ַן ן	2 2	P		E)										10 DA	·Υ
Client PM: Katrina Greene]		. ~] 5	<u> </u>	2	2	늗					ļ						
Project Name: Stormwater	1		190			l li	ျွင့	8	13	8		1 1		1 1				ļ			
Laboratory PM: Brian Cone			•			間	13 2	8	0	g									ł		
Sample Identification	Sample Date	Sample Time	Preservation Used	Matrix	# of Cont.	Filtered Se	Solids.	08G 16	FT-pH: 6.48	Samplin									San	nple Specifi	c Notes:
Outfall 001	12+12	160	1, 2, 4	Water	4				х								П		*A	nalyze un	diluted
						H	T			\top		\top		\sqcap	\top				**	Don't sub	O&G
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	1.					Ш											Ш.				
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaO	H; 6= Other																				
Special Instructions/QC Requirements & Comments:	•••••												_						-		
									•												
Received by:	Company:			Date/Tir	ne: -/)_ i.	47	i	1	iCs		II	N L/	\B:		npany:				Date/Time: / 2-/5	09	1345
Lawrence Spangler	Test Amer	ica Portlan	d	12-	17.6	منه		t /					·-·	Tes	t Ame	rica l	ortia	nd	12-13		1777

	Test	tAmerica Sample I	Receipt	Checklist	_		Fander Highs
Received by:	Unpacked by:	Logged-in by:		Work Order No.	RL0504		
*(section A)	(section 8)			Client: Linder	Morgan Bul	K Ten	m. T-S Portland
Date: 12-15-00	Date: 12 15 08	Date: 12-15 04		Project: Stor	musater		
Time: 1345	ا المالية المالية المالية المالية المالية المالية المالية المالية المالية المالية المالية المالية المالية الم	Initials:			Temperature out	of range:	
Initials: 42> ***ESI Clients (see Section C) Cooler Temperature (IR):		ass NA (oil/air samples	, ESI client	Digi #1 Digi #2) Temperature Blank	ς;	No Id	felted 4 Hours
A Custody Seals: (#)		В		Status: ed, see NOD)		
Signature: Y N Dated:	Dani	ad from:		General:			
None	Keceive	ed from:	1	Intact?	Υ	N	
Container Type:		XTA Courier Senvoy	 	# Containers Match COC	?? Y	N	none given
#Cooler(s)		UPS	i	IDs Match COC?	, Y ,	N	
#Box(s)		Fed Ex	[<u> </u>	or Analyses Requested:			
None (#	Other:)	Client	i	Cyanide Checked?	Υ	N	(NA
Coolant Tuner		TDP	j	Correct Type & Preserva	ition? 〈Y〉	N	
<u>Coolant Type</u> : Gel Ice		DHL	į	Adequate Volume?	Υ	N	
Loose Ice		SDS]	Within Hold Time?	\ y /	N	
None		Mid-Valley	! \	/olatiles/ Oil Quality:			₹
Packing Material:		GS/TA GS/Senvoy]]	VOAs/ Syringes free of Hea	dspace? Y	N	NA
Bubble Bag	as .	Other:		TB on COC? not prov	ided Y	N	NA
Styrofoam	- Cubbies		, 1	<u>Metals</u> :	_		Marie de la companya de la companya de la companya de la companya de la companya de la companya de la companya
Peanuts			, 	HNO3 Preserved?	(y /	N	NA
	Other:)		! 	Dissolved Metals Filtere	d? Y	N	NA
•	· · · · · · · · · · · · · · · · · · ·		FED EX/	UPS: Was the tracking pa	ner keenahle?	YES	NO
*** <u>ESI Clients Only</u> :			1			120	140
Temperature Blank:	C not provided	Digi: # 1 #2		circled NO, what is the Trackin	-		
All preserved bottle All preserved acco		NA (voas/soils/all unp.) NOD) NA (voas/soils/all unp.)	FEDE	X Goldstreak UPS	DHL	Oth	er:
		Project	Managers:				
Comments:		PM Reviewed:		(Initial/Date)			



Sampling Documentation Form

	er Morgan Bu		T5-Por	tland		***************************************
	wrence Span	gler				
Site: Outfall					1-12.06	
Project: Stor	mwater	· · · · · · · · · · · · · · · · · · ·		Time:	1610	
Sample Mat						
√ Water	□ Soi	I □ ∰V	N	□ Chemical	□ Drinking	
□ Other:					<u> </u>	
Sampling N	lathad:					
	w 🗆 Coi	nn-Time	ΥGra	ab	□ Multi-grah	
B Companio		пр-типс	Ø 012		U Wall-grab	
Composite	Sampling Eq	uipment:				
				Start time:	Stop time:	
	ibration:					
	ling Equipme					
X Dipper	□ Bucket	□ Coliwass	a tube	□ Other:	Time.	
pH: 6.98 Temp: Flow-initial: Gallons/day	Cond	alibration-7:06 :	0 butter C!2: _ Flow-	reading: $oldsymbol{b}$.	16	
Field Condi	tions:	·				
Weather:	□ Sunny	□ Partly slo	udy	x Cloudy	: Snowing	
					tu Light 💎 ii Nore	
	aracteristics:		TOO			
Color:	Odor		TSS:			
Sediment: _		Foam:				
Obsprusiin	ns and Comr	nanis:				
					- Marin 12 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	
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Revision #0 8/19/08



ORELAP#: OR100021

November 24, 2008

Katrina Greene Kinder Morgan Bulk Terminals: T5-Portland 15550 N. Lombard Terminal 5 Portland, OR 97203

RE: Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 11/10/08 17:10. The following list is a summary of the Work Orders contained in this report, generated on 11/24/08 16:56.

If you have any questions concerning this report, please feel free to contact me.

Work Order	<u>Project</u>	<u>ProjectNumber</u>
PRK0314	Stormwater	NA

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Katrina Greene

Project Number: Project Manager: NΑ

Report Created:

11/24/08 16:56

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Outfall 001	PRK0314-01	Water	11/10/08 09:30	11/10/08 17:10

TestAmerica Portland

Bream L Come

Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

· Portland, OR 97203

Project Name:

Stormwater

Project Number: Project Manager: NA

Katrina Greene

Report Created: 11/24/08 16:56

Oil and Grease Analysis per EPA Method 1664

					1 030/4111	enca Port	lanu							
Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes			
PRK0314-01	(Outfall 001)		Water Sampled: 11/10/08 09:30											
Oil & Grease		EPA 1664	ND		2.36	mg/l	lx	8110644	11/19/08 18:30	11/20/08 15:26				

TestAmerica Portland

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Brian Cone, Industrial Services Manager

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9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

THE LEADER IN ENVIRONMENTAL TESTING

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Katrina Greene

Project Number: Project Manager:

NA

Report Created:

11/24/08 16:56

Total Metals per EPA 200 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRK0314-01 (Outfall 001)			w	ater		Sam	pled: 11/10/	08 09:30		
Copper	EPA 200.8	0.00399		0.00200	mg/l	1x	8110574	11/18/08 15:44	11/19/08 00:34	
Lead	•	0.00110		0.00100	**	н	•	*	н	
Zinc	**	0.621		0.00500		**	"	Ħ	"	

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Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Project Name: Project Number: Stormwater

Portland, OR 97203

Project Manager:

Katrina Greene

NA

Report Created: 11/24/08 16:56

Conventional Chemistry Parameters per Standard Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PRK0314-01 (Outfall 001)										
Total Suspended Solids	SM 2540D	32.7		4.08	mg/l	1x	8110518	11/14/08 11:57	11/14/08 16:14	

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Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: Project Manager: NA

Katrina Greene

Report Created: 11/24/08 16:56

Field Testing of Conventional Chemistry Parameters per APHA/EPA Methods

TestAmerica Portland

					1 0307 1111	crica i ort	and			**	
Analyte		Method	d Result MDL* MRL Units Dil Batch		Batch	Prepared	Analyzed	Notes			
PRK0314-01	(Outfall 001)			Wa	ter		Sam	pled: 11/10/			
рН		EPA 150.1	6.42			pH Units	lx	8110435	11/10/08 09:35	11/10/08 09:40	

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Brian Cone, Industrial Services Manager

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Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: Project Manager: NA

Katrina Greene

Report Created: 11/24/08 16:56

Oil and Grease Analysis per EPA Method 1664 - Laboratory Quality Control Results TestAmerica Portland

ž			11	- SCATHICTIC	a i Ornano			
QC Batch: 8110644	Water P	reparation M	lethod: O	&G prep	CE			
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike % (Limits) % (Limits) Analyzed Notes
Blank (8110644-BLK1)								Extracted: 11/19/08 18:00
Oil & Grease	EPA 1664	ND		5.00	mg/l	lx		11/20/08 15:26
LCS (8110644-BS1)								Extracted: 11/19/08 18:00
Oil & Grease	EPA 1664	38.2			mg/l	1x		40.0 95.5% (78-114) \{1/20/08 15:26
LCS Dup (8110644-BSD1)								Extracted: 11/19/08 18:00
Oil & Grease	EPA 1664	38.5			mg/l	1x		40.0 96.2% (78-114) 0.782% (18) 11/20/08 15:26

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Portland, OR 97203

PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland Project Name:

15550 N. Lombard Terminal 5 Project Number:

Project Manager:

Stormwater NA

Katrina Greene

Report Created: 11/24/08 16:56

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

	ı otal Me	Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results TestAmerica Portland													
QC Batch: 8110574	Water F	reparation M	ethod: E	PA 200/30	05										
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits) Analyzed	Notes	
Blank (8110574-BLK1)								Extr	acted:	11/18/08 15	:44				
Copper	EPA 200.8	ND		0.00200	mg/l	lx							11/18/08 23:36		
Lead		ND		0.00100	•	н		~					H		
Zinc	**	ND		0.00500	,,	"							H		
LCS (8110574-BS1)								Extr	acted:	11/18/08 15	:44			_	
Copper	EPA 200.8	0.101		0.00200	mg/l	1 x		0.100	101%	(85-115)			11/18/08 23:41		
Lead	н	0.0998		0.00100	"	n		**	99.8%	*			H		
Zinc	"	0.0976		0.00500	**	N		*	97.6%	*			"		
Duplicate (8110574-DUP1)				QC Source:	PRK0313-	01		Extr	acted:	11/18/08 15	:44			_	
Copper	EPA 200.8	0.0130		0.00200	mg/l	1x	0.0130				0.154%	(20)	11/19/08 00:13		
Lead	"	0.00133		0.00100	•	*	0.00131				1.14%		11		
Zinc	*	0.276		0.00500	н	"	0.275				0.435%	6 "	n		
Matrix Spike (8110574-MS1)				QC Source:	PRK0313-	01		Extr	acted:	11/18/08 15	:44				
Copper	EPA 200.8	0.113		0.00200	mg/l	1x	0.0130	0.100	99.7%	(75-125)			11/19/08 00:23		
Lead	"	0.101		0.00100	**	"	0.00131	*	99.8%	*			н		
Zinc	н	0.371		0.00500	**	**	0.275	"	96.0%	(70-130)			e		
Matrix Spike (8110574-MS2)				QC Source:	PRK0328-	61		Extr	acted:	11/18/08 15	:44				
Соррег	EPA 200.8	0.105		0.00200	mg/l	1x	0.00593	0.100	99.4%	(75-125)			11/19/08 01:21		
Lead		0.101		0.00100	*	*	0.000639	"	100%	n			*		
Zinc	*	0.213		0.00500	н		0.119	**	94.4%	(70-130)			**		

TestAmerica Portland

Been L Come

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.



9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

THE LEADER IN ENVIRONMENTAL TESTING

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Katrina Greene

Project Number: Project Manager: NA

Report Created:

11/24/08 16:56

Conventional Chemistry Parameters per Standard Methods - Laboratory Quality Control Results

	· \		Te	estAmerica	a Portland		•					
QC Batch: 8110518	Water P	reparation M	lethod: Ge	eneral Pre	paration							
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike % Amt REC	(Limits) %		s) Analyzed	Notes
Blank (8110518-BLK1)				_				Extracted:	11/14/08 11:57			
Total Suspended Solids	SM 2540D	ND		10.0	mg/l	ix					11/14/08 16:14	
LCS (8110518-BS1)								Extracted:	11/14/08 11:57			
Total Suspended Solids	SM 2540D	50.0		10.0	mg/l	lx		50.0 100%	6 (80-120) -		11/14/08 16:14	
Duplicate (8110518-DUP1)				QC Source:	PRK0363-	01		Extracted:	11/14/08 11:57			
Total Suspended Solids	SM 2540D	76.9		7.69	mg/l	lx	76.9		0.0	0% (20)	11/14/08 16:14	

TestAmerica Portland

Becan L Come

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9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

15550 N. Lombard Terminal 5 Portland, OR 97203 Project Number: Project Manager: NA Katrina Greene Report Created:

11/24/08 16:56

Notes and Definitions

Report Specific Notes:

Nonc

Laboratory Reporting Conventions:

DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.

ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).

NR/NA _ Not Reported / Not Available

dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.

wet Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.

on a wet weight basis.

RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).

MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.

MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B.
 *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results

Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.

Reporting - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.

Electronic Signature

- Electronic Signature added in accordance with TestAmerica's Electronic Reporting and Electronic Signatures Policy.

Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory.

Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Portland

Brean L. Com

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

TestAmerica Portland

9405 SW Nimbus Avenue

Chain of Custody Record

TestAmerica

Beaverton, OR 97008

phone 503.906.9200 fax 503.906.9210										_							restAmerica Laboratories, inc.
Client Contact	Work (Order :	#			П											
Kinder Morgan Bulk Terminals: T5-Portland						ۃ ا											Analysis Turnaround Time
15550 N Lombard Terminal 5	Y	λ.Λ .				200 A	إ						.	1			Analysis rutharound rime
Portland, OR 97203		W V	(03)	1			<u> </u>		1			ìì		1 1	1		
503-285-4200 Phone	<u>\</u> <u>\</u>	7	<u> </u>	<u> </u>		Total (CPMS		*	ءا			1 1					
503-285-7733 FAX	Temperat	ture Upo	n Receipt:			<u> </u>	2 2	ğ	2								10 DAY
Client PM: Katrina Greene						1	S S	2	₩								
Project Name: Stormwater		スー	7			٤	2 00	8	ة احر			}	}	1	1	1	
Laboratory PM: Brian Cone			./			事べ	3 S	8		2		1	1				
Sample Identification	Sample Date	Sample Time	Preservation Used	Matrix	# of Cont.	Pittered Sa	Solids, TSS SM 2540D	0&G 16	FT-pH: 6.42 Sampling Event-Grab								Sample Specific Notes:
Outfall 001	11-10	0430	1, 2, 4	Water	4	>			X X					П			*Analyze undiluted
						П	T										** Don't sub O&G
							T									П	
						H	+		+	†	† † † † †	++		+ +			
						H	+-	\vdash	-	+		+	+	++	+	\vdash	
						Щ	4			_		+		$\perp \perp$		┦	
										1					_l		
						П			-								
							1	\Box		1		1		\top			
						H	+			+	 	+		++	\dashv	H	
						4	4	\sqcup	_	igaplus	++++	\dashv		$\downarrow \downarrow$		Н	
								П									
						1	+			╁╌		++	\dashv	+-+		\dagger	
			L									لبل				Ш	<u> </u>
Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3;	5=NaOH; 6= Other																
Special Instructions/QC Requirements & Comments:									-							_	
Received by:	Company:			Date/Tir	ne:		<u>. </u>				INLLAD	Con	npany:			_	Date/Time:
Lawrence SpangleK	Test Ameri	ca Portian	d	j/	-10-	0 E		09	930	>	IN LAB:	Tes	t Ame	rica Po	ortland		Date Time: 17 10
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			<u> </u>													

	res	tAmerica Sample F	Receipt Checklist	n.		Cooler (D(s):
Received by:	Unpacked by:	Logged-in by:	Wor	rk Order No.	0314	
(section A)	*(section B)	$\cdot L =$	Clie	nt: FINDEN	Morga	<u>~</u>
Date: ///// (23	Date: ////////////////////////////////////	Date: <u> </u>	Proj	ject: Stormu	vater	
Time: 7 10	Initials:	Initials:		Tempera	ture out of range:	
Initials,	//	71			Not	enough ice
1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2]				No	ice Melted
***ESI Clients (see Section C			Dig			n 4 Hours
Cooler Temperature (IR):	7 'C (plastic) g	lass NA (oil/air samples		ii #2 erature Blank:	Oth	ner
	of plustic, g		, cortherny rempe			
A Custody Seals: (#	_)		В	Sample Status: (If N circled, see I		
Signature: Y N Dated:		1.5	General:		_	
None	Receiv	ed from:	Intact?	ĺ	YN	
		TA Courier	1	M-4-b COC2		
Container Type:		Senvoy	1	rs Match COC?	Y	none given
#Cooler(s))	UPS	IDs Match (Y/N	
#Box(s) None (#Other:)	Fed Ex	For Analyses Re			
None (#Other	Client	Cyanide Ch		Y N	(NA)
Coolant Type:		TDP	Correct Typ	pe & Preservation?	N	
Gel Ice		DHL	Adequate \	√olume?	Y) N	
Loose Ice		SDS	Within Hold	d Time?	$\setminus Y = N$	
None		Mid-Valley	Volatiles/ Oil Qu			\sim
		GS/TA		es free of Headspace	e? Y N	(NA
Packing Material:		GS/Senvoy		•		
Bubble Ba	_	Other:	TB on COC?	not provided	Y N	\ NA
Styrofoam	Cubbies		Metals:		(Y) N	
Peanuts			HNO3 Pres		_	NA
	_Other:)		Dissolved	Metals Filtered?	Y N	(MA)
ESI Clients Only:			FED EX/ UPS: Was	the tracking paper kee	epable? YES	NO
Temperature Blank:	°C not provided	Digi: # 1 #2	If circled NO, what	t is the Tracking numbe	er?	
All preserved bot All preserved acc		NA (voas/soils/all unp.) NOD) NA (voas/soils/all unp.)	FED EX Goldstre	eak UPS D	DHL O	ther:
		<u>Project</u>	Managers:			
Comments:						
		PM Reviewed:	(Initial/L	Jate)		



Revision #0 8/19/08

Sampling Documentation Form

Client: Kinder Morgan Bulk Terminals: T5-I	Portland
Sampler: Lawrence Spangler	Date: 4:45 SE
Site: Outfall 001	Date: <u>//-/0~ 08</u> Time: <u>0930</u>
Project: Stormwater	1Ime: <u>89 363</u>
0	
Sample Matrix:	Chamical Dialing
g Water	□ Cnemical □ Drinking
Other:	
Sampling Method:	
□ Comp-Flow □ Comp-Time	Grab □ Multi-grab
Z COMP TIME	
Composite Sampling Equipment:	
□ ISCO #: Comp Samples/day:	Start time: Stop time:
Sampler calibration:	
Grab Sampling Equipment:	
pt Dipper □ Bucket □ Coliwassa tub	e 🛮 Other: Time:OYBO
Field Data:	11
pH: 6.42 pH calibration-7.00 but	fer reading:7.69
lemp: Cond: Cl	2:
	ow-final:
Gallons/day:	
Field Conditions:	
Weather: Sunny Partly cloudy	
Rainfall: Heavy Continuous	□ Intermittent
Sample Characteristics:	
	SS:
Sediment: Foam:	
	_
Observations and Comments:	

KMB00010292

INSTRUCTIONS:

				Ditches		Pond C	lear of	Water	Around	Dock S	urface	Comments
				Debris, B		Debris, E	-	Dock F		Free of E		Describe any corrections taken
			Product	Floating	-		Solids	Floating		Product S	Spillage ?	and the date of completion
Data	Initials	Weather	Handled	& Oily S YES	Sheen? NO	& Oily S		& Oily S		VE0.		AND 1
Date	IIIIIais		папишеи	150	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	RW	Clear	LOSTO									
2	XM	Pain	CO111									
3	KM	Clarkly	NA									
4	Sm	Cloody	NA									
5	mH	Clark	NA									
6	MH	Car	WA							parameter.		
7	MH	Clarly	N/A	مرسست					y week			
8	VM	Clorus	NA									
9	MM	Clean	NA						market.			
10	DM	Clary	NIA									
11	KM	Clary	NA									
12	mH	Clody	NA									
13	Mor	Cloudy	NIA			/						
14	MH	Clovery	N/A			/						
15	ym.	Clardy	NA				are					
			box when reviewed			1	Distributi					
♥.		 Terminal M Assistant 	lanager				Original to F Copy to Stor	ile mwater Repo	ort File			

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches 0	Clear of	Pond C	Clear of	Water	Around	Dock S	Surface	Comments
				Debris, Bl		Debris, E	-	Dock F	ree of	Free of E	xcessive	Describe any corrections taken
			Product	Floating		_	g Solids	Floating	-	Product 9	Spillage?	and the date of completion
				& Oily S		& Oily S		& Oily S	····			
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	AM	Clarky	NA									
17	Km	DOLONG	NIA				.e .					
18	4m	Clary	NA									
19	MH	Clarky	fOFC									
20	mit	Cloudy	Fran					<i></i>				
21	mH	OCLOVER	NIA									
22	Lym	Clouria	N/A						_			
23	MM	Coas	NIA							1		
24	ILM	Clean	SIA									
25	M	Clarky	NIA									
26	MH	Class	NIA									
27	mH	Com	Fhn		-							
28	MH	Olarly	7 Thn			,						
29	Km	Clery	N)/A				,.·			-		
30	KM	Clar	AIL									,
31				A								

MANAGER SIGNATURE: DATE: 769

INSTRUCTIONS:

				Ditches	Clear of	Pond (Clear of	Water	Around	Dock S	Surface	Comments
			:	Debris, B		B	Blockage,		ree of	1	xcessive	Describe any corrections taken
			Product		Solids	1	g Solids	Floating	g Solids		Spillage ?	and the date of completion
	:		:	& Oily	Sheen?	& Oily	Sheen?	& Oily	Sheen?			·
Date		Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	MH	Clear	NA									
2	MH	Pavo	NA	<u></u>	····		٠ - س		· · · · · · · · · · · · · · · · · · ·			
3	m 17	Cloudy	NAA									
4	Km	Cloudy	NA		· ·						<i>'</i>	
5	BW.	Dair	NA									
6	AM	Dain	NIA				_·				c"	
7	2m	Clarke	NA				.					
8	MH	Cloude	NA									
9	tim!	Clean	NA									
10	mt	Ollowdy	NA						e en e			
11	Km	Clorky	NA						e e e e e e e e e e e e e e e e e e e			
12	DM	Bain	N/A.	<i>1</i>								
13	12m	Clary	10P8S				-					
14	HM	Migrally	WESS		<u> </u>							
15	HM	Olina	G171			James State						
			oox when reviewed			1	Distributi			1		
-		Terminal M Assistant	anager				Original to F Copy to Stor		ort File			

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches	Clear of	Pond C	Clear of	Water	Around	Dock S	Surface	Comments
				Debris, B	-		Blockage,		ree of		xcessive	Describe any corrections taken
1			Product	Floating		· ·	g Solids		Solids	Product 9	Spillage ?	and the date of completion
			11. 8. 4	& Oily S			Sheen?	& Oily		7/50	N.0	(A)
Date		Weather	Handled)	YES	NO	YES	NO 	YES	NO	YES	NO	(Attach separate sheet if required)
16	WH	Cloon	NA									
17	mH	Clean	NA									
18	Mm.	Cloar	NA									
19	MM	Cloxy	NIA				AMERICA TO					
20	MM	Cloudy	N/A									
21	MM	Clear	NIA									
22	WH	Char	NA									
23	mH	Cloan	NA	<u></u>		سا						
24	mH	Clean	NA									
25	ЙW	Cons	NA									
26	Km	Can	N/A									
27	KM	Clarin	NA		and the second s							
28	BM	Coan	NA						and the second s			
29	MH	Coan	42I5		-				· .			
30	WH	Clar	NA									
31	m/7	Cloan	N/A		- *							

MANAGER SIGNATURE: July Well DATE: 6/1/09

INSTRUCTIONS:

_											· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
				Ditches	Clear of	Pond C	Clear of	Water	Around	Dock S	urface	Comments
				Debris, B	lockage,	Debris, E	Blockage,	Dock F	ree of	Free of E	xcessive	Describe any corrections taken
			Product	Floating	Solids	Floating	g Solids	Floating	Solids	Product S	pillage ?	and the date of completion
1				& Oily S	Sheen?	& Oily 9	Sheen?	& Oily 9	Sheen?			
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	PW	Rain	NA								<i>′</i>	
2	PW	Cloody	NA	-	are.						·	
3	PW	Dain	NA									
4	PW	DClourly	NA									
5	PW	Plan	NIA						·		er	
6	MM	Cloon	NIA		<i></i>							
7	Km	(Oon	NIA									
8	PW	Morrie	R870									
9	PW	Dain	NA									
10	PW	Rain	4111									
11	PW	OC love	NA									
12	PW	Cloudly	NA		<i>'</i>							
13	Km	Rain	NA							, , , , , , , , , , , , , , , , , , ,		
14	KM	Dain	NIR									
15	PW	Clarke	GSIC									
)	1								
	Routing:		box when reviewed			1	Distributi					
		2. Terminal M	lanager				Original to F					
		3. Assistant]		L	Copy to Sto	mwater Rep	ort File			

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

			Ditchoo	Cloar of	Pond (loar of	Motor	Around	Dook S	Surface	Comments
			1								Describe any corrections taken
.		Product	i			· ·					and the date of completion
		1 Todact				_	1	-	Floudet	opiliaye :	and the date of completion
Initials	Weather	Handled							YES	NO	(Attach separate sheet if required)
1).			120	110	120	110		7.0		7.0	(Authorities all and all all and all and all and all and all and all and all a
· · · /	-										
RW	Dan	NA									
MH	Log	NA									
mH	Cloan	NIA		ar ann							
		NA						_			
		NIA									
		NA		<u> </u>							
Km	' '	ì				<i></i>		<i></i>			
Rm	Cloud	Wh				**					
MH	. 1	1								7	
	ϵ V	1 1				and the second s					
	V ()								سنر.	,-	
		i ',									
1	<u> </u>	NA		/	/		.//				
Km	Ana	NA								American control of	
	1			1					~	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
	FR B B F F F F F F F F F F F F F F F F F	KM Close MM Clo	KM Cloon N/A MH Sog N/A MH Cloon N/A MM Cloon N/A	Initials Weather Handled YES Howard NA MH Sog NA MH Cloan NA Handled YES MA MH Cloan NA Handled YES Handled YES H	Initials Weather Handled YES NO HM Charle Flow MM Clark NA MM Clark NA HM Clark NA	Product Ploating Solids Floating Solids & Oily Sheen? & Oi	Product Product Product Product Product Ploating Solids & Oily Sheen? YES NO YES NO HM Plan Handled Product Product Ploating Solids & Oily Sheen? YES NO YES NO HM Plan HAND H	Debris, Blockage, Product Floating Solids & Oily Sheen? &	Product Product Product Product Product Ploating Solids & Oily Sheen? Rolling Solids Rolling Solids	Product Product Product Product Product Product Product Product Solids & Oily Sheen? Product Solids & O	Product Product Ploating Solids & Oily Sheen? Product Spillage? Pr

MANAGER SIGNATURE: DATE: 5/1/09

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

	1							T THOTHER,				
				Ditches		i	Clear of		Around		Surface	Comments
				Debris, B	-		Blockage,		ree of	Free of E		Describe any corrections taken
			Product	Floating			g Solids		g Solids	Product 9	Spillage ?	and the date of completion
				& Oily S			Sheen?	& Oily				
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	\$M	Dain	4111	,/								
17	Km	Bain	4111	<u></u>								
18	KM	Tarty	Flom			2						
19	PW	Dain	5 Yrm									
20	Pio	Octor	} _	سا			<u> </u>					
21	RIO	Chry	MA	1								
22		OCIDAIN	1									
23	PW	Clouin	NA									
24	BM	Pain	NIA	1				~				
25	PW	Bain	MA	\sim								
26	pw	Aloudy	NA	\overline{C}								
27	DW	Morala	MA									
28	PW	Show	NA			,					حسرس	
29	PW	Mazh	NA					\ \rangle	and the second	1		
30	pw	O Cloudy	14/8			C'announce.						
31	AM	Rain	alla				>1-	7				

MANAGER SIGNATURE DATE: 5/3//09

INSTRUCTIONS:

				Ditches	Clear of	Pond C	Clear of	Water	Around	Dock S	Surface	Comments
				Debris, B	lockage,	Debris, E	Blockage,	Dock F	ree of	Free of E	xcessive	Describe any corrections taken
			Product	Floating	g Solids	Floating	g Solids	Floating	g Solids	Product S	Spillage?	and the date of completion
				& Oily S		& Oily S		& Oily S				
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO_	YES	NO	(Attach separate sheet if required)
1	AM	Dlock	NA									
2	PW	Closcly	NA					<u></u>				
3	Bm	Clany	MA			-						
4	PW	Chali	MIN					1				
5	DW	O laxly	MA									
6	PW	Cloran	10 A									
7	MM	Clary	NA									
8	DW	Clarly	4115									
9	PW	Close										
10	KM	Cloudy	NA									
11	PD	Com	ND									
12	PW	Coon	NA	مر ن								
13	PW	Clean	RSTO								,	
14	XM	Clarly	MA									
15	PIO	Dain	MOIS									
		Please check I 2. Terminal M 3. Assistant	box when reviewed lanager				Distributi Original to F Copy to Sto		ort File			

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches Clear	of Pond Cle	oar of	Water	Around	Dock S	curfoco	Comments
				Debris, Blockag	1		Dock F		1	xcessive	Describe any corrections taken
			Product	Floating Solid			Floating			Spillage ?	and the date of completion
			110000	& Oily Sheen	_		& Oily S	_	1 Todact C	philage :	and the date of completion
Date	Initials	Weather	Handled	YES NO		NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	Km	dos	COLIA							marin'	
17	2m	polar	MA								
18	Km	Xlone	NIA								
19	KM	Phone	NA								
20	PW	Clean	NA								
21	MH	Dain	NB								
22	mH	Clowy	NA								
23	KM	Cloudy	N/A	v	V		/		/		
24		Clourly	.)								
25	MM	Chooly	NA								
26	12m	Clanu		<i>(</i> -				·			
27	SM	Cloudy	MA								
28	l. ^ '	Cloude	NIA								
29	1										
30											
31											
						1 7	~				

KMB00010301

INSTRUCTIONS:

	r											
				Ditches		Pond C	Clear of	Water	Around	Dock S	Surface	Comments
				Debris, B	lockage,	Debris, E	Blockage,	Dock f	ree of	Free of E	xcessive	Describe any corrections taken
			Product	Floating	g Solids	Floating	g Solids	Floating	g Solids	Product 9	Spillage?	and the date of completion
				& Oily S	Sheen?	& Oily	Sheen?	& Oily	Sheen?			
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	W17,	Log	NA		_				··			
2	MM	Log	COTECUL		-							
3	Km	DC POSCIU	40IS									
4	BM	Obox	NA	<u></u>	-	- 6						
5	8m	Clear	COATA									
6	MH	Clarle	61I1	6					, mare en en en en en en en en en en en en en			
7	mH	Closely	NA						and the second s			
8	MH	Chain	NA		Jan.							
9	MM	Clary	,		,			المستحدث المستحدث				
10	\$m	Smay	NA	1/		[/						
11	bM	Clarly	NA									
12	MM	Monin	MA							-		
13	MH	Closely	NA									
14	MH	0,000m	NA								,-	
15	mH	Closen	6174									
	Routing:	Please check	box when reviewed	ļ			Distributi	on:		1		
		2. Terminal M					Original to F					
		3. Assistant					Copy to Stor		ort File			
				=						_		•

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

			-	Ditches Cl	lear of	Pond C	Clear of	Water	Around	Dock S	Surface	Comments
				Debris, Blo	-	i	Blockage,	Dock F	*	1	xcessive	Describe any corrections taken
			Product	Floating S			g Solids	Floating		Product 9	Spillage ?	and the date of completion
Date	Initials	Weather	Handled	& Oily Sh YES	ieen? NO	& Oily S	Sheen? NO	& Oily S	Sheen? NO	YES	NO	(Attack and water all and if any view d)
Date				153	NO	TEO	NO	150	NO	TES	NO	(Attach separate sheet if required)
16	WH	Clear	PSTO			<u></u>	`	-				
17	mH	Log	4015						· 			
18	ωH	Clean	RFSS	1					····			
19		Clan	LOSTO									
20		200m	P8TO									
21	BW	Clean	NA						•			
22	MM	Clar	NA					<u></u>				
23	mH	40G	QSIS									
24	mlt	Cloudy	LOSTO				·					
25	MH	Smaa (LOSTO					i/				
26	AM	OCIDUZA	RSTO		·							
27	Am	Dan	NA							4		
28	mH.	Jany	AM					L	· .			
29	Km.	Tog	MA	/		/						
30	MH	202	NA									
31	MH	Lot	MA	4								

MANAGER SIGNATURE: 2/2/09

INSTRUCTIONS:

		1		Ditab	Olean af	Dan d C	Name of					0
				Ditches			Clear of		Around	Dock S		Comments
				Debris, B	_	Debris, E		Dock F		B .	xcessive	Describe any corrections taken
			Product		g Solids	Floating		· -	g Solids	Product 9	Spillage?	and the date of completion
				& Oily S		& Oily		& Oily S				
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	Km.	Dain	NA									
2	4 m	Dain	WESS									
3	m 4	Whale	COSIS							,		
4	m H	Log	GSIS									
5	Hm	Dain	LOFSS							1		
6	RM	Pain	WESS			1						
7	BM	Rain	6111									
8	Rm	Dain	GLIL									
9	MH	Cloudy	fais	V								
10	MH	Log	DSTO.	1								
11	mH	Clarky	PSTO	1		<u> </u>		2				
12	Km	Prin	NA			-			APPE	-		
13	BM	Soc	PSTO			1		V		1		
14	AM	Mary	OSTO	1/							,	
15	AM	Low	OSTO									
	Routing:	Places charles	nov whon so down d	1			Distributi	001				
		2. Terminal M	box when reviewed				Original to F					
		3. Assistant				. —	_	mwater Repo	ort File			

INSTRUCTIONS:

	J				Clear of		Clear of		Around		Surface	
				Debris, B			Blockage,		Free of		xcessive	Comments Describe any corrections taken
1			Product	1	Solids		g Solids	Floating		1	Spillage ?	and the date of completion
ł				& Oily	-		Sheen?	& Oily 8	_	1 Toddor C	opiliage :	and the date of completion
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	Km	Clourly	GATA									
2	AM	Cloudy	LOSTO	<u></u>		س			<u></u>			
3	KM	Phage	WPSS			<u></u>			[
4	12 m	Cléan	NA									
5	DW	Clear	N/A									
6	<i>D</i> m	Log	10570	1								
7	DW	Clour	WFSS					L-		ست		
8	5M	Moni	LOFSS									· · · · · · · · · · · · · · · · · · ·
9	BW.	Locy	LOPSS									
10	BM	ann	NA	<u></u>				سن				
11	M	Cort	CHIL		·····							
12	MH	Clary	OFSS									
13	MH	Roan	NA			~						
14	MH	Snai	NA									
15	Km	polon	NIA	·							and the second s	
	Routing:	Please check 2. Terminal M 3. Assistant) box when reviewed lanager			Distributi Original to F Copy to Stor		ort File				

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches (Clear of	Pond C	Clear of	Water /	Around	Dock S	urface	Comments
				Debris, Bl	ockage,	Debris, E		Dock F	ree of	Free of E	xcessive	Describe any corrections taken
			Product	Floating			Solids	Floating		Product S	Spillage ?	and the date of completion
1				& Oily S		& Oily S		& Oily S				
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16		C000	35I5									
17	MM	Cloudy	65I5	1		<u></u>						
18	KM	Lain	RSTO							1		
19	MA	Smow	725F	اسا								
20	MHS	asma	Allow	1	-				• 	<u> </u>		
21	PO	Smad	NA		,							
22	Km	Smad	MA		-							
23	ym.	Good	NA	1		i		u		~		
24	KM	Smad	RSTO			ر ا		<i>c</i> —				
25	12m	Smore	NIA	ر ا		ر ا						
26	mH	400	MA	-					- -			
27	MH	Pan	Adra									
28	MH	Clorely	Zhn					~				
29	RM	Drein	4215									
30	RM	Clorar	4215					سسرين				
31	Mm	Dam	10F85,		\							

MANAGER SIGNATURE: 159

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

		<u> </u>		Ditches Cle	ear of	Pond C	lear of	Water	Around	Dock S	urface	Comments
				Debris, Bloc			lockage,	Dock F		Free of E		Describe any corrections taken
			Product	Floating S	Solids	Floating	Solids	Floating	Solids	Product S	Spillage ?	and the date of completion
				& Oily She	een?	& Oily S	Sheen?	& Oily S	Sheen?	<u> </u>		
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	MH	Log	NA				_					
17	4m	Log	MA									
18	2m	405	GSIS					`				
19	8m	Dary	12570							<i></i>		
20	KM.	Cloudy	NA			اسما		1				
21	BM	Cloca	NIA					L				
22	W/7	Locy	MA					<u></u>				
23	WH	fog	NIA			\overline{C}		6				
24	Km	Dody	Alm									
25	KM	Closer	175m					1	·			
26	MM	Clary	OSIS						1	2	i	
27	Km	Plany	NA									
28	W 17	Log	Flor									
29	m H	400	NA									
30	MH	Log	6111								-	
31												

MANAGER SIGNATURE: DATE: 17 1 8 9

INSTRUCTIONS:

				Ditches	Clear of	Pond C	Clear of	Water	Around	Dock S	Surface	Comments
				Debris, B		Debris, E		Dock I		ł	xcessive	Describe any corrections taken
			Product		Solids		Solids	Floating			Spillage ?	and the date of completion
				& Oily S	Sheen?	& Oily S	Sheen?		Sheen?			·
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	mH	Clowy	WESS			ر ا	-	<u></u>		~		
2	WH	Prin	NA	اس_ا		اسا		<u></u>		6		
3	BM	Shows	NA						 	~		
4	BD	Cloucy	Allo	1		<i></i>		<u></u>				
5	BM.	Rain	N/A	<u> </u>		4		ن		1		
6	RW	Dain	RSTO					<u></u>		1		
7	MH	Shown	PSTP			~	 -					
8	mH	Cloudy	RSTO		_	V				i		
9	217	Cloudy	N/A	ر ا							,,	
10	KM	Pain	N/A					- 5				
11	\$m	Dano	NOB							1		
12	KM.	Dain	MA	1				سا				
13	KM	Clarly	NIA							,		
14	MH	Can	MA			1		2		1		
15	m17	Clean	NIA					<u></u>				
		Please check to 2. Terminal M	box when reviewed anager				Distributi Original to F Copy to Stor		ort File			

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches Clea	ar of	Pond C	Clear of	Water	Around	Dock S	Surface	Comments
				Debris, Block		Debris, E		Dock F		J	xcessive	Describe any corrections taken
			Product	Floating So	-		Solids	Floating		Product S		and the date of completion
				& Oily Shee		& Oily		& Oily S			` ĭ	
Date	Initials	Weather	Handled		VO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	Rm	Cloudy	NIA					i_				
17	MH	400	NA					i —				
18	M4	Clossy	NA					1	union.	1		
19	mH	40g	LOESS			<u> </u>		-6-	are see			
20	KM	Cloydy	ALA							6	.·	
21	Km	100g	7 Drn									
22	4m	De Chech	Film			_رز						
23	\$m	X book	MA				-					
24	MA	Clear	WITO			ر ز						
25	mH	Clear	MA							1_		
26	m 17	Clear	Den					1				
27	HM	Polovin	7 Lbm			'سرن		2				
28	19/10	500	WSTO			سا	i	<i>i</i>		2		
29	RM.	Dog	4/1A			<u> </u>				-		
30	KM	Llow	MA			~	- س		·			
31	m4	Rain	14/2			i .						

MANAGER SIGNATURE: DELLE DATE: 10/31/08

INSTRUCTIONS:

				Ditches	Clear of	Pond C	lear of	Water	Around	Dock S	Surface	Comments
			:	Debris, B		Debris, E		Dock F			xcessive	Describe any corrections taken
			Product	Floating	-	Floating	_	Floating		Product S	Spillage?	and the date of completion
]				& Oily S	Sheen?	& Oily S	Sheen?	& Oily S	Sheen?			
Date	Initials	Weather	<u>Handled</u>	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	KM	709	hо	V		V	 	/		✓		
2	KM	Rain	no	V		v		V		~		
3	MH	Pain	CO	~		<u></u>		<u> </u>		V		
4	4m	Shows	Alm			<i>L</i>						
5	0-11	Dain	7 Thm	سيا								
6	ym.	Prin	UDS70		***	L-	-	i		4	_	
7	50	Pair	Floor	1								
8	50	Loa	Ihm			سيا						
9	2m	Dartuck	voll PSTO			اسا	<i></i>	_ 1		4		
10	MH	Clou	1 DSTD					1				
11	wH	Clory	LOFSS		a de la companya de la companya de la companya de la companya de la companya de la companya de la companya de			1				
12	MH	Clack	GSIS				, er	L		0		
13	PW	OCloure	Allm			T/	and the second s	i	-			
14	11 m	Corola	NA									
15	KM	Morry	lary 7 Man						1			
		Please check t	pox when reviewed		-		Distributi]		
		 Terminal Magnetic Assistant 	anager				Original to Fi	le mwater Repo	rt File			

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches	Clear of	Pond C	Clear of	Water	Around	Dock S	urface	Comments
				Debris, B	lockage,	Debris, E	Blockage,	Dock F	ree of	Free of E		Describe any corrections taken
			Product	Floating	g Solids	Floating	Solids	Floating	g Solids	Product S	Spillage ?	and the date of completion
				& Oily S			Sheen?	& Oily	Sheen?	<u> </u>		
Date	Initials	Weather	Handled	YES	NO	YES	ES NO		NO	YES	NO	(Attach separate sheet if required)
16	AM.	Coas	Allon			<u></u>		-				
17		Clear	76RN	N/		V		V		V		
18		Pthy Cldy	7GRN	V		V		i v		~		
19	KM	Pfycldy	76RN	/				V		<u></u>	-·· ;	·
20		Cloude	76RN	V				سن ا		ر ا		
21	MH	Rain	No	/	-	/		/		~		
22	KM	Cloudy	no	V		ν		レ		V		
23	KM	Fra O	76RN	V		~		/		~		
24	KM	Cloudy	76RN	V		✓		V		V		
25		Ptly Clay	65I5	V				V		~		
	1.1	Clear	AST D	V		✓	 	<u> </u>		/		
27	m 1+	Clear	RF55			~		$\overline{\mathcal{C}}$				
28	MH	Clear	WPSS	/		~						
29		clear	76RN	V		V				i/		
30	KM	Clear			V	レ		V		V		
31			\ 01	.701			,		<u> </u>			

MANAGER SIGNATURE: DATE: 1018 48

INSTRUCTIONS:

	11001101		Complete triis	log cacit	uay. Off	ine last ac	ty or odor	i iliolitii, it	nwara as	3 IOWIT OF	Tine Hou	
				Ditches	Clear of	Pond C	Clear of	Water	Around	Dock S	Surface	Comments
				Debris, B	_	1	Blockage,	Dock	Free of	Free of E	xcessive	Describe any corrections taken
			Product	Floating		ľ	g Solids		g Solids	Product 9	Spillage ?	and the date of completion
				& Oily S			Sheen?		Sheen?			
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	MH	Chair	MA			1		i		V		
2	MH	Clock	MA	سا						4		
3	AM	Dood	Allon	1		<u></u>		1				
4	Bm	Clan	1050									
5	mH	Clean	G1I1	L	_					1		
6	m17	Clearly	MLF			i	~	c				
7	MH	Clear	LOFSS	Lummun			, posteri	a				in the second se
88	MH	Clean	GATI			ن	<i></i> -					
9	RM	Clean	WSTO							-		
10	KM	Clear	Allen			<u></u>						· .
11	Km	Clear	RSTO					4		<i>i</i>		
12	MH	Clear	WESS							<i>i</i>		
13	MH	Clas	WESS									
14	mH	Clear	6111		<i>-</i>			<i></i>				
15	Kro	Clear	Ihn					î/				
		Please check b 2. Terminal Ma 3. Assistant	pox when reviewed anager				Distributi Original to F Copy to Stor		nt File			

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

				Ditches	Clear of	Pond C	Clear of	Water	Around	Dock S	urface	Comments
			l	Debris, B		Debris, E	_	Dock F		Free of E		Describe any corrections taken
1			Product	Floating			Solids	Floating	-	Product S	Spillage?	and the date of completion
D-4-	ladata la	141 11	11111	& Oily S			Sheen?	& Oily S		V=0		
Date		Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	mH	Cloan	4215	L-		i		4		1		
17	m #	Copin	WESS	<u></u>		C		4		4		
18	MM	Closely	72hm			1		~				
19	MM	Clargu	Allon			~	-	W		1		
20	BM	Bring	ALLON	1		1						
21	5m	Charly	LOSTO			سا		i –		~		
22	m#	PChora	IDESS					i –		~		
23	MH	Clear	RESS	<u></u>	· 			ت		<i>U</i>		
24		Clan	OT LS			<u></u>	-	<u></u>		س		
25	Km	Chry	Allen			سيا		<u></u>		V		
26		PClarly	- 01									
27	Km	Clarly	Alm							i		
28	bm	(Clorain	NIA					سرن	e.	1		
29	mit	tha	25.70			i		-		(
30	MH	DO DOW	Flow	سا		<u> </u>		L				
31	m#	MOST	Alfa	W.	1			1				

MANAGER SIGNATURE:

INSTRUCTIONS:

	11001101	10.	Complete this	log each	uay. On	ine last de	ay or caci	i inoriui, it	nwaiu as	SHOWITO	i line noul	ing list.
				Ditches	Clear of	Pond C	Clear of	Water	Around	Dock S	Surface	Comments
l				Debris, B	_		Blockage,	Dock i	Free of	Free of E	1	Describe any corrections taken
Ì			Product	2	g Solids	`	g Solids	I	g Solids	Product 9	Spillage?	and the date of completion
ļ				& Oily			Sheen?		Sheen?	ļ,		
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	MH	Closely	FOIS					4		-		
2	W/7	Clarky	NA									
3	mH	Cloxu	NIA	L		<u></u>	···			<u></u>		
_4	BM	Cloan	NA	L	·····				and the same of th	<u></u>		
_5	×m	Clan	NA									
6	KM	Clean	Den	سا					— <u> </u>			
7	12m	2100dy	Allo		· /			ر ا			,	
8	MH	Closcler	85IS					4				
9	MH	Bain	MA			-		1				
10	mH	Cloudy	NIA					0	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1		
11	YM.	Claxin	NA			2		س				
12	bm	Mocal	NA						<u></u>			
13	KM	Clear	Yais			سر ز	/ 					
14	RW	Clan	CAIL	1								
15	MH	Clar	GIII			سا		<u></u>				
		Please check I	pox when reviewed	i			Distributi]		

Routing:	Please check box when reviewed	Distribution:
	2. Terminal Manager	Original to File
	3. Assistant	Copy to Stormwater Report File

INSTRUCTIONS:

_	 	T	I Complete tille									
				Ditches		Pond Clear of		Water Around		Dock Surface		Comments
				Debris, B	•	Debris, Blockage,		Dock Free of		Free of Excessive		Describe any corrections taken
Į	İ		Product	Floating					Floating Solids		Spillage ?	and the date of completion
Doto	Initials	10/224524	11	& Oily S				& Oily Sheen?				
Date		Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
1	ω_{H}	Clean	RSTD				·					
2	MB	Clary	4111			-	ar		***	Ü		
3	MH	Cloury	61 I 4			~	para and an an an an an an an an an an an an an	ــــن	Market State			
4	m 17	Chacin	Floor									
5	MH	Clarchy	NA			<u></u>				.1		
6	MH	Oholu		سا		1				2		
7	Ban	Dorw	NA						<i></i>	L	e e	
8	Bm	Clan	NA	سرا .								
9	pm	Closs	W/A	<i>\</i>				<i>i</i>	/			
10	KM	Olean	NA		arran							
11	MH	Cloon	NA			<u></u>						
12	MH	Clean	NA						and the second of	L		
13	mit	Clean	NIA	Ĺ,,,		اسا				ر کے ا		
14	Km	Clar	NIA		· -	ر ز	1					
15	Am	Olore	ND		/	V						
		Please check? 2. Terminal M. 3. Assistant	Dox when reviewed anager			Distribution: Original to File Copy to Stormwater Report File						

INSTRUCTIONS:

Complete this log each day. On the last day of each month, forward as shown on the "Routing" list.

Γ			Ditches Clear of Pond Clear of Water Around Dock Surface Comments									
1				Debris, B		Debris, E		Dock Free of		Free of Excessive		Describe any corrections taken
1			Product	Floating	•	Floating Solids		Floating Solids		Product Spillage?		and the date of completion
	1			& Oily S	Sheen?	& Oily Sheen?		& Oily Sheen?				
Date	Initials	Weather	Handled	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
16	KM	PCloudy	AM			س		<u>ر</u>		i		
17	MM	Dog]					<i>~</i>				······································
18	MH	Cloudy	QN/A			1				1		
19	MH	Charly	NA	<u></u>		1	- Andrews	<u></u>				
20	μm	Clean	NA				and the second					
21	BM	Clory	NA			سي				<u> </u>		
22	HM	Monda	Fin	<u></u>		ر ا						
23	BM	and	Hym									
24	Re	Marle	Allo					L				
25	MH	Clean	4215	ر ز		<u>i</u>		i		نسن		
26		~ ~	GIT	1		سين		L				
27	mH	clooky	NA	1		<u></u>			**			
28	Am	Clear	NA	L		<u> </u>				-	and the second of the second o	
29	DM	Clary	NA	1		<u></u>		<i>`</i>		1		
30	Rec	Closar	AIN									
31	AM	DCIDA	4 LOFS	1,001		<u></u>				1		

KMB00010316

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

Climatological Report (Monthly)

000 CXUS56 KPQR 011523 CLMPDX

JULY CLIMATOLOGICAL REPORT FOR PORTLAND OREGON NATIONAL WEATHER SERVICE PORTLAND OREGON 811 AM PDT FRI AUG 1 2008

TEMPERATURE DATA (DEGREES F) AVERAGE MONTHLY TEMPERATURE 68.8 OR 0.7 DEGREES ABOVE NORMAL AVERAGE MAXIMUM TEMPERATURE 80.8 AVERAGE MINIMUM TEMPERATURE 56.8 HIGHEST TEMPERATURE WAS 93 ON DAY 13 LOWEST TEMPERATURE WAS 51 ON DAY 11								
HEATING DEGREES DAYS (BASE 65) COOLING DEGREES DAYS MONTHLY TOTAL								
PRECIPITATION DATA								
SNOW TOTAL FOR THE MONTH								
NUMBER OF DAYS WITH .01 INCHES OR MORE 4 HIGHS 32 DEGREES OR COLDER 0 WITH .10 INCHES OR MORE 1 HIGHS 90 DEGREES OR WARMER 5 WITH .50 INCHES OR MORE 0 LOWS 32 DEGREES OR COLDER 0 WITH 1.00 INCHES OR MORE 0 LOWS 0 DEGREES OR COLDER 0								
SKY CONDITION SEA LEVEL PRESSURE (INCHES) NUMBER OF DAYS CLEAR 10 HIGHEST 30.23 ON 23								

VISIT HTTP://WEATHER.GOV/PORTLAND

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Climatological Report (Monthly)

CXUS56 KPQR 011506

000

CLMPDX							
AUGUST CLIMATOLOGICAL REPORT FOR PORTLAND OREGON NATIONAL WEATHER SERVICE PORTLAND OREGON 810 AM PDT MON SEP 1 2008							
TEMPERATURE DATA (DEGREES F) AVERAGE MONTHLY TEMPERATURE 69.6 OR 1.1 DEGREES ABOVE NORMAL AVERAGE MAXIMUM TEMPERATURE 80.0 AVERAGE MINIMUM TEMPERATURE 59.2 HIGHEST TEMPERATURE WAS 102 ON DAY 14 LOWEST TEMPERATURE WAS 48 ON DAY 31							
HEATING DEGREES DAYS (BASE 65) COOLING DEGREES DAYS MONTHLY TOTAL							
PRECIPITATION DATARAIN TOTAL FOR THE MONTH 1.23 OR 0.3 INCHES ABOVE NORMAL TOTAL SINCE JANUARY 1ST 17.26 OR 3.96 INCHES BELOW NORMAL GREATEST 24 HOUR RAINFALL 0.44 ON 19-20							
TOTAL FOR THE MONTH 0.0 TOTAL FOR THE SEASON 0.0 GREATEST 24 HOUR SNOWFALL 0							
NUMBER OF DAYS WITH .01 INCHES OR MORE 9 HIGHS 32 DEGREES OR COLDER 0 WITH .10 INCHES OR MORE 5 HIGHS 90 DEGREES OR WARMER 5 WITH .50 INCHES OR MORE 0 LOWS 32 DEGREES OR COLDER 0 WITH 1.00 INCHES OR MORE 0 LOWS 0 DEGREES OR COLDER 0							
SKY CONDITION SEA LEVEL PRESSURE (INCHES) NUMBER OF DAYS CLEAR 3 HIGHEST 30.21 ON 28 NUMBER OF DAYS PTCLDY 22 LOWEST 29.65 ON 17							

NUMBER OF DAYS CLOUDY.... 6 WIND DATA..... THE AVERAGE MONTHLY WIND SPEED WAS... 6.0 MPH THE FASTEST TWO-MINUTE WIND WAS..... 21 MPH FROM 310 DEGREES THE HIGHEST PEAK WIND GUST WAS..... 26 MPH FROM 320 DEGREES REMARKS....... ALL RECORDS ARE FOR THE PORTLAND INTL AIRPORT SITE. RECORDS AT THIS SITE BEGAN IN OCTOBER 1940. 14TH...RECORD MAXIMUM TEMPERATURE OF 102 DEGREES. OLD RECORD 97 SET IN 1967. 15TH...RECORD HIGH MINIMUM TEMPERATURE OF 67 DEGREES. OLD RECORD 65 SET IN 1950. ... RECORD MAXIMUM TEMPERATURE OF 100 DEGREES. OLD RECORD 98 SET IN 1967. 16TH...RECORD HIGH MINIMUM TEMPERATURE OF 68 DEGREES. OLD RECORD 63 SET IN 1979. 17TH...RECORD HIGH MINIMUM TEMPERATURE OF 67 DEGREES. OLD RECORD 66 SET IN 1977.

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Climatological Report (Monthly)

000 CXUS56 KPQR 031912 CCA CLMPDX

SEPTEMBER CLIMATOLOGICAL REPORT FOR PORTLAND OREGON...CORRECTED NATIONAL WEATHER SERVICE PORTLAND OREGON 1201 PM PDT FRI OCT 3 2008

TEMPERATURE DATA (DEGREES F)									
AVERAGE MONTHLY TEMPERATURE 65.2 OR 1.6 DEGREES ABOVE NORMAL									
AVERAGE MAXIMUM TEMPERATURE 77.3									
AVERAGE MINIMUM TEMPERATURE 53.1									
HIGHEST TEMPERATURE WAS 91 ON DAY 11									
LOWEST TEMPERATURE WAS 44 ON DAY 23									
HEATING DEGREES DAYS (BASE 65) COOLING DEGREES DAYS									
MONTHLY TOTAL 57 MONTHLY TOTAL 73									
DEPARTURE FROM NORMAL21 DEPARTURE FROM NORMAL 21 SEASONAL TOTAL (JUL-JUN). 80 SEASONAL TOTAL (JAN-DEC) 474									
DEPARTURE FROM NORMAL40 DEPARTURE FROM NORMAL 86									
PRECIPITATION DATARAIN									
TOTAL FOR THE MONTH 0.48 OR 1.17 INCHES BELOW NORMAL									
TOTAL SINCE JANUARY 1ST 17.85 OR 5.14 INCHES BELOW NORMAL									
GREATEST 24 HOUR RAINFALL 0.42 ON 21-22									
SNOW									
TOTAL FOR THE MONTH 0.0									
TOTAL FOR THE SEASON 0.0									
GREATEST 24 HOUR SNOWFALL 0									
NUMBER OF DAYS									
WITH .01 INCHES OR MORE 3 HIGHS 32 DEGREES OR COLDER 0									
WITH .10 INCHES OR MORE 3 HIGHS 32 DEGREES OR CONDER 0 WITH .10 INCHES OR MORE 1 HIGHS 90 DEGREES OR WARMER 2									
WITH .10 INCHES OR MORE I HIGHS 90 DEGREES OR WARMER 2 WITH .50 INCHES OR MORE 0 LOWS 32 DEGREES OR COLDER 0									
WITH 1.00 INCHES OR MORE 0 LOWS 0 DEGREES OR COLDER 0									
WITH I.UU INCHES OR PIORE U HOWS U DEGREES OR COHDER U									
SKY CONDITION SEA LEVEL PRESSURE (INCHES)									
NUMBER OF DAYS CLEAR 11 HIGHEST 30.28 ON 22									
NUMBER OF DAIS CLEAR II - HIGHESI 30.20 ON 22									

NUMBER OF DAYS PTCLDY.... 13 LOWEST 29.74 ON 8
NUMBER OF DAYS CLOUDY.... 6

WIND DATA.....

THE AVERAGE MONTHLY WIND SPEED WAS... 5.1 MPH
THE FASTEST TWO-MINUTE WIND WAS..... 23 MPH FROM 70 DEGREES
THE HIGHEST PEAK WIND GUST WAS..... 30 MPH FROM 110 DEGREES

REMARKS.....

ALL RECORDS ARE FOR THE PORTLAND INTL AIRPORT SITE. RECORDS AT THIS SITE BEGAN IN OCTOBER 1940.

11TH...A RECORD HIGH TEMPERATURE OF 91 DEGREES WAS SET.
THIS BREAKS THE OLD RECORD OF 90 SET IN 1975.
29TH...A RECORD HIGH TEMPERATURE OF 89 DEGREES WAS TIED.
THIS TIES THE OLD RECORD OF 89 SET IN 1993.

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Climatological Report (Monthly)

000 CXUS56 KPQR 011515 CLMPDX

OCTOBER CLIMATOLOGICAL REPORT FOR PORTLAND OREGON NATIONAL WEATHER SERVICE PORTLAND OREGON 814 AM PDT SAT NOV 1 2008

(DEGREES F) AVERAGE MONTHLY TEMPERATURE 53.5 OR 0.8 DEGREES BELOW NORMAL AVERAGE MAXIMUM TEMPERATURE 62.2 AVERAGE MINIMUM TEMPERATURE 44.9 HIGHEST TEMPERATURE WAS 73 ON DAY 1
AVERAGE MAXIMUM TEMPERATURE 62.2 AVERAGE MINIMUM TEMPERATURE 44.9
AVERAGE MINIMUM TEMPERATURE 44.9
HIGHEST TEMPERATURE WAS 73 ON DAY 1
LOWEST TEMPERATURE WAS 37 ON DAY 24
HEATING DEGREES DAYS (BASE 65) COOLING DEGREES DAYS
MONTHLY TOTAL 349 MONTHLY TOTAL 0
DEPARTURE FROM NORMAL 30 DEPARTURE FROM NORMAL2
DEPARTURE FROM NORMAL 30 DEPARTURE FROM NORMAL2 SEASONAL TOTAL (JUL-JUN). 429 SEASONAL TOTAL (JAN-DEC) 474
DEPARTURE FROM NORMAL10 DEPARTURE FROM NORMAL 84
PRECIPITATION DATARAIN
TOTAL FOR THE MONTH 1.77 OR 1.11 INCHES BELOW NORMAL
TOTAL SINCE JANUARY 1ST 19.51 OR 6.24 INCHES BELOW NORMAL
GREATEST 24 HOUR RAINFALL 0.73 ON 3-4
SNOW
TOTAL FOR THE MONTH 0.0
TOTAL FOR THE SEASON 0.0
GREATEST 24 HOUR SNOWFALL 0
NUMBER OF DAYS
WITH .01 INCHES OR MORE 12 HIGHS 32 DEGREES OR COLDER 0
WITH .10 INCHES OR MORE 8 HIGHS 90 DEGREES OR WARMER 0
TILL 130 INCLUDE ON HORIZON I DON'D SI PIONIZIO ON GOTTONIO
WITH 1.00 INCHES OR MORE 0 LOWS 0 DEGREES OR COLDER 0
SKY CONDITION SEA LEVEL PRESSURE (INCHES)
NUMBER OF DAYS CLEAR 3 HIGHEST 30.59 ON 21

NUMBER OF DAYS PTCLDY.... 19 LOWEST 29.29 ON 4
NUMBER OF DAYS CLOUDY.... 9

WIND DATA.....

THE AVERAGE MONTHLY WIND SPEED WAS... 5.1 MPH
THE FASTEST TWO-MINUTE WIND WAS.... 31 MPH FROM 90 DEGREES
THE HIGHEST PEAK WIND GUST WAS.... 38 MPH FROM 100 DEGREES

REMARKS......

NO RECORDS TIED OR BROKEN

VISIT HTTP://WEATHER.GOV/PORTLAND

These data are preliminary and have not undergone final quality control by the National Climatic Data Center (NCDC). Therefore, these data are subject to revision. Final and certified climate data can be accessed at the NCDC - http://www.ncdc.noaa.gov.

Climatological Report (Monthly)

000 CXUS56 KPQR 011444 CLMPDX

NOVEMBER CLIMATOLOGICAL REPORT FOR PORTLAND OREGON NATIONAL WEATHER SERVICE PORTLAND OREGON 644 AM PST MON DEC 1 2008

TEMPERATURE DATA								
(DEGREES F)								
AVERAGE MONTHLY TEMPERATURE 49.2 OR 3.4 DEGREES ABOVE NORMAL								
AVERAGE MAXIMUM TEMPERATURE 55.1								
AVERAGE MINIMUM TEMPERATURE 43.3								
HIGHEST TEMPERATURE WAS 64 ON DAY 7								
LOWEST TEMPERATURE WAS 33 ON DAY 24								
HEATING DEGREES DAYS (BASE 65) COOLING DEGREES DAYS								
MONTHLY TOTAL 465 MONTHLY TOTAL	0							
DEPARTURE FROM NORMAL95 DEPARTURE FROM NORMAL	0							
SEASONAL TOTAL (JUL-JUN). 894 SEASONAL TOTAL (JAN-DEC) 47	4							
DEPARTURE FROM NORMAL 8	4							
PRECIPITATION DATARAIN								
TOTAL FOR THE MONTH 4.15 OR 1.46 INCHES BELOW NORMAL								
TOTAL SINCE JANUARY 1ST 23.66 OR 7.7 INCHES BELOW NORMAL								
GREATEST 24 HOUR RAINFALL 0.94 ON 12-12								
SNOW								
TOTAL FOR THE MONTH 0.0								
TOTAL FOR THE SEASON 0.0								
GREATEST 24 HOUR SNOWFALL 0								
NUMBER OF DAYS								
WITH .01 INCHES OR MORE 17 HIGHS 32 DEGREES OR COLDER	0							
WITH .10 INCHES OR MORE 9 HIGHS 90 DEGREES OR WARMER	0							
	0							
WITH 1.00 INCHES OR MORE 0 LOWS 0 DEGREES OR COLDER	0							
SKY CONDITION SEA LEVEL PRESSURE (INCHES)	_							
NUMBER OF DAYS CLEAR 0 HIGHEST 30.56 ON 14	-							

VISIT HTTP://WEATHER.GOV/PORTLAND

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Climatological Report (Monthly)

000 CXUS56 KPQR 211908 CLMPDX

CLIMATE REPORT NATIONAL WEATHER SERVICE PORTLAND OREGON 1108 AM PST WED JAN 21 2009

... THE PORTLAND OR CLIMATE SUMMARY FOR THE MONTH OF DECEMBER 2008...

CLIMATE NORMAL PERIOD 1971 TO 2000 CLIMATE RECORD PERIOD 1940 TO 2009

WEATHER	OBSERVE VALUE	D DATE(S)	NORMAL VALUE	DEPART FROM NORMAL	LAST YE VALUE	EAR`S DATE(S)
TEMPERATURE (F)	• • • • • • •			• • • • • • •	• • • • • • •	• • • • • •
HIGH	65	12/10/199	12			
LOW	6	12/16/196				
		•	• 4		60	10/04
HIGHEST	57	12/01			62	•
LOWEST	20	12/21			27	12/09
		12/20				
		12/16				
AVG. MAXIMUM	42.8		45.4	-2.6	45.5	
AVG. MINIMUM	32.1		35.0	-2.9	36.4	
MEAN	37.5		40.2	-2.7	40.9	
DAYS MAX >= 90	0		0.0	0.0	0	
DAYS MAX <= 32	6		1.2	4.8	0	
DAYS MIN <= 32	14		9.8	4.2	6	
DAYS MIN <= 0	0		0.0	0.0	0	
	ŭ					
PRECIPITATION (RECORD	INCHES)					
MAXIMUM	13.35	1996				
MINIMUM	1.38	1976				
TOTALS	2.70	10,0	5.71	-3.01	7.57	
TOTATO	2./0		J./1	- 3.01	1.57	

. •						
DAYS >= .01				2.7		
DAYS >= .10					17	
	1				3	
DAYS >= 1.00	0		1.1	-1.1	2	
GREATEST						
24 HR. TOTAL	0.68	12/29 '	ГО 12/29			
SNOWFALL (INCHE	S)					
TOTALS	MM					
DEGREE_DAYS						
HEATING TOTAL	847		756	91	740	
SINCE 7/1	1741		1755	-14	1824	
COOLING TOTAL	0		0	0	0	
SINCE 1/1	474		390	84	400	
WIND (MPH)						
AVERAGE WIND SP	EED		8.9			
RESULTANT WIND		RECTION				
HIGHEST WIND SP				DATE	12/14	
HIGHEST GUST SP						
SKY COVER	NE /DED	×==×=== \				
POSSIBLE SUNSHI	NE (PERC	CENT) I	MM			
NUMBER OF DAYS	FAIR		2			
NUMBER OF DAYS	PC		4			
NUMBER OF DAYS	CLOUDY	:	25			
AVERAGE RH (PER	CENT)	83				
WEATHER CONDITI	ONG NITE	FDED OF 1	חאעכ שדיים			
THUNDERSTORM	OND. NON	0	MIXED PR	FCT D		0
HEAVY RAIN		2	RAIN	DCT.		7
LIGHT RAIN		16		DATN		0
LT FREEZING RAI	NT	3	HAIL	KATN		0
HEAVY SNOW	14	1	SNOW			8
LIGHT SNOW		12	SLEET			0
FOG		25		c /- 1//	1 MTT.F	4
HAZE		∠ 5 2	TOG M/ VI	O ~= 1/4	. 1,17717	-1
IIIACC		2				
- INDICATES NE	GATIVE 1	UMBERS.				
R INDICATES RE	CORD WAS	S SET OR	TIED.			
MM INDICATES DA	TA IS MI	SSING.				

T INDICATES TRACE AMOUNT.

Climatological Report (Monthly)

000 CXUS56 KPQR 020033 CCA CLMPDX

CLIMATE REPORT NATIONAL WEATHER SERVICE PORTLAND OREGON 752 AM PST SUN FEB 1 2009

... THE PORTLAND OR CLIMATE SUMMARY FOR THE MONTH OF JANUARY 2009...

CLIMATE NORMAL PERIOD 1971 TO 2000 CLIMATE RECORD PERIOD 1940 TO 2009

WEATHER	OBSERVE VALUE	D DATE(S)	NORMAL VALUE	DEPART FROM NORMAL	LAST YI VALUE	EAR`S DATE(S)
TEMPERATURE (F)	• • • • • • •					
RECORD						
HIGH	66	01/18/200	15			
LOW	-2	01/31/195				
HIGHEST		01/07			55	01/04
LOWEST	25	01/04			23	· · · · · · · · · · · · · · · · · · ·
AVG. MAXIMUM	46.2	0-, 0-	45.6	0.6		,
AVG. MINIMUM	33.9		34.2	-0.3	33.6	
MEAN	40.0		39.9	0.1	38.8	
DAYS MAX >= 90	0		0.0	0.0	0	
DAYS MAX <= 32	0		1.3	-1.3	0	
DAYS MIN <= 32	16		11.6	4.4	9	
DAYS MIN <= 0	0		0.0	0.0	0	
PRECIPITATION (RECORD	INCHES)					
MAXIMUM	8.51	1980				
MINIMUM	0.06	1985				
TOTALS	4.50		5.07	-0.57	4.71	
DAYS >= .01	14		17.2	-3.2	19	
DAYS >= .10	9		11.5	-2.5	13	
DAYS >= .50	2		3.2	-1.2	4	

DAYS >= 1.00 1 GREATEST	0.8	0.2	0
24 HR. TOTAL 3.13	01/01 TO 01/02		
SNOWFALL (INCHES)			
TOTALS MM			
DEGREE_DAYS			
HEATING TOTAL 767	765	2	805
SINCE 7/1 2508	2520	-12 0	2629
COOLING TOTAL 0			
SINCE 1/1 0		0	
• • • • • • • • • • • • • • • • • • • •			· · · · · · · · · · · · · · ·
WIND (MPH)			
AVERAGE WIND SPEED	7.2		
RESULTANT WIND SPEED/DI	RECTION 4/130		
HIGHEST WIND SPEED/DIRE			
HIGHEST GUST SPEED/DIRE	CTION 44/100	DATE 01/1	18
SKY COVER			
POSSIBLE SUNSHINE (PERC	ENT) MM		
NUMBER OF DAYS FAIR	6		
NUMBER OF DAYS PC	10		
NUMBER OF DAYS CLOUDY	15		
AVERAGE RH (PERCENT)	79		
WEATHER CONDITIONS. NUM	BER OF DAYS WITH		
THUNDERSTORM	0 MIXED PR	ECIP	0
HEAVY RAIN	2 RAIN		4
LIGHT RAIN	15 FREEZING	RAIN	0
LT FREEZING RAIN	0 HAIL		1
HEAVY SNOW	0 SNOW		3
LIGHT SNOW	6 SLEET		0
FOG	24 FOG W/VI	S <= 1/4 MII	LE 12
HAZE	3	·	
- INDICATES NEGATIVE N	UMBERS.		
R INDICATES RECORD WAS			
MM INDICATES DATA IS MI			
T INDICATES TRACE AMOU			

Climatological Report (Monthly)

000 CXUS56 KPQR 041830 CLMPDX

CLIMATE REPORT
NATIONAL WEATHER SERVICE PORTLAND OREGON
1015 AM PST WED MAR 4 2009

... RETRANSMITTED.

... THE PORTLAND OR CLIMATE SUMMARY FOR THE MONTH OF FEBRUARY 2009...

CLIMATE NORMAL PERIOD 1971 TO 2000 CLIMATE RECORD PERIOD 1940 TO 2009

WEATHER	OBSERVE VALUE		NORMAL VALUE	DEPART FROM NORMAL	LAST YI VALUE	EAR`S DATE(S)
TEMPERATURE (F) RECORD HIGH LOW		02/28/198				
HIGHEST	59	02/04			63	02/29 02/28
LOWEST AVG. MAXIMUM AVG. MINIMUM MEAN DAYS MAX >= 90 DAYS MAX <= 32 DAYS MIN <= 32 DAYS MIN <= 0	25 50.2 32.4 41.3 0 0 17	02/12	50.3 35.9 43.1 0.0 0.3 7.1 0.0	-3.5 -1.8 0.0		<u> </u>
PRECIPITATION (RECORD MAXIMUM MINIMUM TOTALS DAYS >= .01 DAYS >= .10	10.03 0.72 1.36 15	1996 1993	4.18 15.9 10.5	-0.9	2.19 15 6	

DAYS >= .50	0	2.2	-2.2	2	
DAYS >= 1.00	0	0.5	-0.5	0	
GREATEST					
24 HR. TOTAL	0.45 02/23	TO 02/24			
SNOWFALL (INCHES)	0 0				
TOTALS	0.0				
DEGREE DAYS					
HEATING TOTAL	656	605	51	578	
SINCE 7/1		3125	39	3207	
COOLING TOTAL			0		
SINCE 1/1			0		
WIND (MPH)					
AVERAGE WIND SPEE		6.2			
RESULTANT WIND SP					
HIGHEST WIND SPEE					
HIGHEST GUST SPEE	D/DIRECTION	36/240	DATE 0	2/25	
CITI COLUED					
SKY COVER	(DED CENTE)	NANA.			
POSSIBLE SUNSHINE	(PERCENT)	IAIIAI			
NUMBER OF DAYS FA	TR	1			
NUMBER OF DAYS PC		16			
NUMBER OF DAYS CL		11			
AVERAGE RH (PERCE	NT) 76				
WEATHER CONDITION	S. NUMBER OF	DAYS WITH			
THUNDERSTORM	0	MIXED PRE	ECIP		1
HEAVY RAIN	0	RAIN			3
LIGHT RAIN	15	FREEZING	RAIN		0
LT FREEZING RAIN	0	\mathtt{HAIL}			0
HEAVY SNOW	0	SNOW			1
LIGHT SNOW	4	SLEET			0
FOG	23	FOG W/VIS	S <= 1/4	MILE	7
HAZE	3				
TAIDT CAMBO AIRCA	mitte Nimanee				
- INDICATES NEGATOR INDICATES RECO					
		TIED.			
MM INDICATES DATA T INDICATES TRAC					
T INDICATES TRAC	E AMOUNT.				

#FINAL-02-09#

Climatological Report (Monthly)

000 CXUS56 KPQR 011524 CLMPDX

CLIMATE REPORT NATIONAL WEATHER SERVICE PORTLAND OREGON 824 AM PDT WED APR 1 2009

... THE PORTLAND OR CLIMATE SUMMARY FOR THE MONTH OF MARCH 2009...

CLIMATE NORMAL PERIOD 1971 TO 2000 CLIMATE RECORD PERIOD 1940 TO 2009

WEATHER	OBSERVED VALUE	DATE(S)	NORMAL VALUE	DEPART FROM NORMAL	LAST YEA VALUE D	
TEMPERATURE (F)						
HIGHEST	61				65	03/10
LOWEST	29				32	03/22
AVG. MAXIMUM	52.5		55.7	-3.2	52.9	
AVG. MINIMUM	38.1		38.6	-0.5	37.9	
MEAN	45.3		47.2	-1.9	45.4	
DAYS MAX >= 90	0		0.0	0.0	0	
DAYS MAX <= 32	0		0.0	0.0	0	
DAYS MIN <= 32	3		3.0	0.0	1	
DAYS MIN <= 0	0		0.0	0.0	0	
PRECIPITATION (INCHES)					
RECORD						
MAXIMUM	7.14	1997				
MINIMUM	1.49	1978				
TOTALS	3.36		3.71	-0.35	3.71	
DAYS >= .01	25		17.2	7.8	24	
DAYS >= .10	15		10.4	4.6	13	
DAYS >= .50	0		1.7	-1.7	1	
DAYS >= 1.00	0		0.1	-0.1	0	
GREATEST						

24 HR. TOTAL 0.49 03/28	TO 03/28	
SNOWFALL (INCHES) TOTALS MM		
DEGREE DAYS		
HEATING TOTAL 599	536 63 598	
SINCE 7/1 3763		
COOLING TOTAL 0	3661 102 3805 0 0 0	
SINCE 1/1 0	0 0 0	
		• • • • • •
WIND (MPH)		
AVERAGE WIND SPEED		
RESULTANT WIND SPEED/DIRECTION	2/166	
HIGHEST WIND SPEED/DIRECTION	36/250 DATE 03/15	
HIGHEST GUST SPEED/DIRECTION	46/260 DATE 03/15	
SKY COVER		
POSSIBLE SUNSHINE (PERCENT)	MM	
	2	
NUMBER OF DAYS PC NUMBER OF DAYS CLOUDY	7	
NUMBER OF DAYS CLOUDY	22	
AVERAGE RH (PERCENT) 71		
WELD CONTINUE AND TO SE		
WEATHER CONDITIONS. NUMBER OF THUNDERSTORM 1		0
THUNDERSTORM 1 HEAVY RAIN 4	RAIN	7
LIGHT RAIN 24	FREEZING RAIN	0
LT FREEZING RAIN 0		4
HEAVY SNOW 0	SNOW	1
LIGHT SNOW 3	SLEET	0
FOG 19	FOG W/VIS <= 1/4 MILE	3
HAZE 3		
- INDICATES NEGATIVE NUMBERS.		
R INDICATES RECORD WAS SET OR	TIED.	
MM INDICATES DATA IS MISSING.		
T INDICATES TRACE AMOUNT.		



Climatological Report (Monthly)

000 CXUS56 KPQR 011559 CLMPDX

CLIMATE REPORT NATIONAL WEATHER SERVICE PORTLAND OREGON 859 AM PDT FRI MAY 1 2009

... THE PORTLAND OR CLIMATE SUMMARY FOR THE MONTH OF APRIL 2009...

CLIMATE NORMAL PERIOD 1971 TO 2000 CLIMATE RECORD PERIOD 1940 TO 2009

WEATHER	OBSERVED VALUE	DATE(S)	NORMAL VALUE	DEPART FROM NORMAL	LAST YEAR`S VALUE DATE(S)
	• • • • • • • •			• • • • • • •	• • • • • • • • • • • •	• •
TEMPERATURE (F)						_
HIGHEST	83				78 04/1	
LOWEST	31				31 04/0	1
AVG. MAXIMUM	62.3		60.5	1.8	56.7	
AVG. MINIMUM	42.2		41.9	0.3	40.3	
MEAN	52.3		51.2	1.1	48.5	
DAYS MAX >= 90	0		0.0	0.0	0	
DAYS MAX <= 32	0		0.0	0.0	0	
DAYS MIN <= 32	1		0.7	0.3	1	
DAYS MIN <= 0	0		0.0	0.0	0	
PRECIPITATION (INCHES)					
RECORD						
MAXIMUM	5.26	1993				
MINIMUM	1.04	1998				
TOTALS	2.31		2.64	-0.33	2.09	
DAYS >= .01	14		15.3	-1.3	21	
DAYS >= .10	8		7.9	0.1	8	
DAYS >= .50	1		0.9	0.1	1	
DAYS >= 1.00	0		0.2	-0.2	0	
GREATEST	-					

24 HR. TOTAL 0.63 04/27 TO 04/28

SNOWFALL (INCHES)
TOTALS 0.0

DEGREE_DAYS
HEATING TOTAL 374 400 -26

HEATING TOTAL 374 400 -26 490 SINCE 7/1 4137 4061 76 4295 COOLING TOTAL 0 1 -1 0 SINCE 1/1 0 1 -1 0

SINCE 1/1 0 1 -1 0

WIND (MPH)

AVERAGE WIND SPEED 6.2

RESULTANT WIND SPEED/DIRECTION 1/254

HIGHEST WIND SPEED/DIRECTION 35/370

HIGHEST WIND SPEED/DIRECTION 25/270 DATE 04/13 HIGHEST GUST SPEED/DIRECTION 35/200 DATE 04/12

SKY COVER

POSSIBLE SUNSHINE (PERCENT) MM

NUMBER OF DAYS FAIR 5
NUMBER OF DAYS PC 14
NUMBER OF DAYS CLOUDY 11

AVERAGE RH (PERCENT) 64

WEATHER CONDITIONS. NUMBER OF DAYS WITH

MERITIER COMPTITIONS.	HOMBER OF	Dillo Willi	
THUNDERSTORM	1	MIXED PRECIP	0
HEAVY RAIN	0	RAIN	6
LIGHT RAIN	17	FREEZING RAIN	0
LT FREEZING RAIN	0	HAIL	1
HEAVY SNOW	0	SNOW	0
LIGHT SNOW	0	SLEET	0
FOG	10	FOG W/VIS <= 1/4 MILE	1
HAZE	4		

⁻ INDICATES NEGATIVE NUMBERS.

KMB00010336

R INDICATES RECORD WAS SET OR TIED.

MM INDICATES DATA IS MISSING.

T INDICATES TRACE AMOUNT.

Climatological Report (Monthly)

000 CXUS56 KPQR 011530 CLMPDX

CLIMATE REPORT
NATIONAL WEATHER SERVICE PORTLAND OREGON
824 AM PDT MON JUN 1 2009

... THE PORTLAND OR CLIMATE SUMMARY FOR THE MONTH OF MAY 2009...

CLIMATE NORMAL PERIOD 1971 TO 2000 CLIMATE RECORD PERIOD 1940 TO 2009

WEATHER	OBSERVED VALUE	DATE(S)		DEPART FROM NORMAL		
• • • • • • • • • • • • • • • • • • • •			• • • • • • • •	• • • • • • • •		• • • • • • • •
TEMPERATURE (F)						
HIGHEST	88				95	•
LOWEST	42				39	05/04
AVG. MAXIMUM	71.5		66.7	4.8	67.5	
AVG. MINIMUM	48.7		47.5	1.2	50.3	
MEAN	60.1		57.1	3.0	58.9	
DAYS MAX >= 90	0		0.4	-0.4	2	
DAYS MAX <= 32	0		0.0	0.0	0	
DAYS MIN <= 32	0		0.0	0.0	0	
DAYS MIN <= 0	0		0.0	0.0	0	
PRECIPITATION (INCHES)					
MAXIMUM	5.55	1993				
MINIMUM	0.10	1992				
TOTALS	3.26		2.38	0.88	2.03	
DAYS >= .01	14		12.8	1.2	15	
DAYS >= .10	6		7.0	-1.0	5	
DAYS >= .50	3		1.2	1.8	1	
DAYS >= 1.00	1		0.1	0.9	0	
GREATEST						
24 HR. TOTAL	1.09	05/04 TO	05/05			

SNOWFALL (INCHES)

TOTALS 0.0

DEGREE_DAYS

HEATING TOTAL	175	243	-68	223	
SINCE 7/1	4312	4304	8	4518	
COOLING TOTAL	34	14	20	40	
SINCE 1/1	34	15	19	40	

WIND (MPH)

AVERAGE WIND SPEED 7.3

RESULTANT WIND SPEED/DIRECTION 3/294

HIGHEST WIND SPEED/DIRECTION 29/250 DATE 05/05

HIGHEST GUST SPEED/DIRECTION 41/240 DATE 05/02

SKY COVER

POSSIBLE SUNSHINE (PERCENT) MM

NUMBER OF DAYS FAIR 12 NUMBER OF DAYS PC 13 NUMBER OF DAYS CLOUDY 6

AVERAGE RH (PERCENT) 60

WEATHER CONDITIONS. NUMBER OF DAYS WITH

	-	MINED DEBOTE	^
THUNDERSTORM	Ţ	MIXED PRECIP	0
HEAVY RAIN	4	RAIN	7
LIGHT RAIN	12	FREEZING RAIN	0
LT FREEZING RAIN	0	HAIL	0
HEAVY SNOW	0	SNOW	0
LIGHT SNOW	0	SLEET	0
FOG	8	FOG W/VIS <= 1/4 MILE	0
HAZE	7		

⁻ INDICATES NEGATIVE NUMBERS.

REMARKS...4TH/ RECORD RAINFALL 1.02 INCHES. OLD RECORD 0.74 INCHES IN 1979.

R INDICATES RECORD WAS SET OR TIED.

MM INDICATES DATA IS MISSING.

T INDICATES TRACE AMOUNT.

Climatological Report (Monthly)

000 CXUS56 KPQR 011450 CLMPDX

CLIMATE REPORT NATIONAL WEATHER SERVICE PORTLAND OREGON 750 AM PDT WED JUL 1 2009

... THE PORTLAND OR CLIMATE SUMMARY FOR THE MONTH OF JUNE 2009...

CLIMATE NORMAL PERIOD 1971 TO 2000 CLIMATE RECORD PERIOD 1940 TO 2009

WEATHER	OBSERVED VALUE	DATE(S)	NORMAL VALUE	DEPART FROM NORMAL	LAST YE VALUE	EAR`S DATE(S)
			• • • • • • • •	• • • • • • • •		• • • • • •
TEMPERATURE (F)					100	06/00
HIGHEST	90				100	06/28
LOWEST	51				46	06/10
AVG. MAXIMUM	74.8		72.7	2.1		
AVG. MINIMUM	56.6		52.6	4.0	51.9	
MEAN	65.7		62.7	3.0	61.8	
DAYS MAX >= 90	1		1.1	-0.1	1	
DAYS MAX <= 32	0		0.0	0.0	0	
DAYS MIN <= 32	0		0.0	0.0	. 0	
DAYS MIN <= 0	0		0.0	0.0	0	
PRECIPITATION (INCHES)					
RECORD						
MAXIMUM	4.06	1984				
MINIMUM	0.14	1987				
TOTALS	1.32		1.59	-0.27	1.01	
DAYS >= .01	9		8.8	0.2	10	
DAYS >= .10	2		4.5	-2.5	1	
DAYS >= .50	1		0.7	0.3	1	
DAYS >= 1.00	0		0.1	-0.1	0	
GREATEST	-					

24 HR. TOTAL 0.97 06	6/18 TO 06/19	
SNOWFALL (INCHES)		
TOTALS 0.0		
DECREE DAVC		
DEGREE_DAYS HEATING TOTAL 29	96 -67 147	
HEATING TOTAL 29 SINCE 7/1 4341	4400 -59 4665	
COOLING TOTAL 56	43 13 58	
SINCE 1/1 90		
		•
WIND (MPH)		
AVERAGE WIND SPEED		
RESULTANT WIND SPEED/DIREC	CTION 4/304	
	ION 39/190 DATE 06/04	
HIGHEST GUST SPEED/DIRECTI	ION 49/190 DATE 06/04	
SKY COVER		
POSSIBLE SUNSHINE (PERCENT	T) MM	
NUMBER OF DAYS FAIR	5	
NUMBER OF DAYS PC	8	
NUMBER OF DAYS CLOUDY		
AVERAGE RH (PERCENT)	61	
WEATHER CONDITIONS. NUMBER	R OF DAYS WITH	
THUNDERSTORM HEAVY RAIN	1 MIXED PRECIP 0	
HEAVY RAIN	1 RAIN 2	
	10 FREEZING RAIN 0	
	0 HAIL 0	
HEAVY SNOW	0 SNOW 0	
LIGHT SNOW	O SLEET O	
FOG	3 FOG W/VIS <= 1/4 MILE 0	
HAZE 1	13	
- INDICATES NEGATIVE NUME	BERS.	
R INDICATES RECORD WAS SE	ET OR TIED.	
MM INDICATES DATA IS MISSI	ING.	
m Tirricianes measur allomin		

T INDICATES TRACE AMOUNT.



PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

ORELAP#: OR100021

February 27, 2009

Katrina Greene Kinder Morgan Bulk Terminals: T5-Portland 15550 N. Lombard Terminal 5 Portland, OR 97203 Jing Mul

RE: Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 02/24/09 14:10. The following list is a summary of the Work Orders contained in this report, generated on 02/27/09 16:32.

If you have any questions concerning this report, please feel free to contact me.

Work Order	<u>Project</u>	<u>ProjectNumber</u>
PSB0684	Stormwater	NA

TestAmerica Portland

Bream L Come

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.

Brian Cone, Industrial Services Manager

allthus places



PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Project Manager:

Stormwater

Katrina Greene

Project Number:

NA

Report Created: 02/27/09 16:32

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Outfall 001	PSB0684-01	Water	02/23/09 14:05	02/24/09 14:10
Culvert	PSB0684-02	Water	02/23/09 14:00	02/24/09 14:10
Pond	PSB0684-03	Water	02/23/09 14:10	02/24/09 14:10

TestAmerica Portland

Becan L. Come

Brian Cone, Industrial Services Manager

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www.testamericainc.com



PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: Project Manager: NA

Katrina Greene

Report Created: 02/27/09 16:32

Total Metals per EPA 200 Series Methods

TestAmerica Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PSB0684-01	(Outfall 001)			Water Sampled: 02/23/09 14:05							
Zinc		EPA 200.8	0.173		0.00500	mg/l	1x	9020798	02/25/09 11:44	02/25/09 22:48	
PSB0684-02	(Culvert)			W:	ater		Sam	pled: 02/23/	09 14:00		
Zinc		EPA 200.8	3.32		0.0500	mg/l	10x	9020798	02/25/09 11:44	02/26/09 01:19	
PSB0684-03	(Pond)			W:	ater		Sam	pled: 02/23/	09 14:10		
Zinc		EPA 200.8	0.00643		0.00500	mg/l	lx	9020798	02/25/09 11:44	02/25/09 23:15	

TestAmerica Portland

Beam L Come

Brian Cone, Industrial Services Manager

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PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

Katrina Greene

15550 N. Lombard Terminal 5 Portland, OR 97203

Project Number: Project Manager: NA

Report Created: 02/27/09 16:32

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

	,		7	TestAmeric	a Portland	i						*
QC Batch: 9020798	Water F	Preparation M	lethod: E	PA 200/30	05							
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike % Amt RE		% (Liı	mits) Analyzed	Notes
Blank (9020798-BLK1)								Extracted	: 02/25/09 1	1:44		
Zinc	EPA 200.8	ND		0.00500	mg/l	lx					02/25/09 22:10	
LCS (9020798-BS1)								Extracted	: 02/25/09 1	1:44		
Zinc	EPA 200.8	0.0899		0.00500	mg/l	1 x		0.100 89.9	(85-115)		02/25/09 22:16	
Duplicate (9020798-DUP1)				QC Source:	PSB0546-	10		Extracted	: 02/25/09 1	1:44		
Zinc	EPA 200.8	0.0679	***	0.00500	mg/l	lx	0.0676			0.516% (20	0) 02/25/09 22:26	
Matrix Spike (9020798-MS1)				QC Source:	PSB0546-	11		Extracted	: 02/25/09 1	1:44		
Zinc	EPA 200.8	0.0959		0.00500	mg/l	1x	0.00161	0.100 94.39	(70-130)		02/25/09 22:43	
Matrix Spike (9020798-MS2)				QC Source:	PSB0684-	01		Extracted	: 02/25/09 1	1:44		
Zinc	EPA 200.8	0.272		0.00500	mg/l	lx	0.173	0.100 98.59	% (70-130)		02/25/09 22:53	

TestAmerica Portland

Been L. Come

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PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

NΑ

Portland, OR 97203

15550 N. Lombard Terminal 5

Project Number: Project Manager:

Katrina Greene

Report Created: 02/27/09 16:32

Notes and Definitions

Report Specific Notes:

None

Laboratory Reporting Conventions:

Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only. DET

Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate). ND

NR/NA _ Not Reported / Not Available

dry Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.

Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported wet

on a Wet Weight Basis.

RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries). **RPD**

METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table. MRL

MDL* METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported

as Estimated Results.

Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution Dil

found on the analytical raw data.

Reporting -Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and Limits

percent solids, where applicable.

- Electronic Signature added in accordance with TestAmerica's Electronic Reporting and Electronic Signatures Policy. Electronic Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Signature

Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Portland

Bean L. Come

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11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244 11922 E. First Ave, Spokane, WA 99206-5302

9405 SW Nimbus Ave.Beaverton, OR 97008-7145

425-420-9200 FAX 420-9210 509-924-9200 FAX 924-9290 503-906-9200 FAX 906-9210 907-563-9200 FAX 563-9210

2000 W International Airport Rd Stc A10, Anchorage, AK 99502-1119

Work Order #: \$60684 CHAIN OF CUSTODY REPORT CLIENT: Kinder Musian Bull Formmis: T-5- Northad INVOICE TO: REPORT TO: Katina Green a
ADDRESS: 15550 N Lombind Triminal 5

PHONE: 503285-4200 FAX: 503-285-7753

PROJECT NAME: 5 DEPUMBER in Business Days * Organie & Inorganie Analyses PO NUMBER: PRESERVATIVE PROJECT NUMBER: REQUESTED ANALYSES Science of SAMPLED BY: Lawrence Junger * Turnaround Requests less than standard may incur Rush Charges 3 SAMPLING MATRIX # OF LOCATION/ CLIENT SAMPLE CONT. COMMENTS WO ID IDENTIFICATION DATE/TIME (W, S, O) atfall ocl U2-29-09 1405 W ruvent UZ-27-09 Luco X, W 0277.09 w 1410 DATE: 02-24-69 DATE:02-24-09 RECEIVED BY RELEASED BY: 1436 PRINT NAME: TIME: PRINT NAME: TIME: 1410 DATE: RELEASED BY: DATE: RECEIVED BY: PRINT NAME TIME: TIME: PRINT NAME: FIRM: TEMP: ADDITIONAL REMARKS:

TestAmerica Sample Receipt Checklist PSB0684 Work Order No.___ Logged-in by: Received by: Unpacked by: (section B) *(section A) Date: 2-24-09 Date: 02-24.09 Time: 1430 Temperature out of range Initials: - > Not amonghilde Ice Melted ***ESI Clients (see Section C) Digi #1 Wila 4 Hours Digi#2 Cooler Temperature (IR): 2.9 'C (plastic) glass NA (oil/air samples, ESI client) Temperature Blank: Sample Status: Custody Seals: (# ____) (If N circled, see NOD) Signature: Y N Dated: General: Received from: Ν Intact? **Y** TA Courier # Containers Match COC? Ν none given Container Type: Senvoy メ #Cooler(s) IDs Match COC? UPS #Box(s) For Analyses Requested: Fed Ex MA) #Other: None (Cyanide Checked? Client Correct Type & Preservation? TDP Coolant Type: Adequate Volume? DHL Gel Ice Within Hold Time? SDS Loose Ice HF Dilution Required? Mid-Valley None Volatiles/ Oil Quality: GS/TA ŃΑ VOAs/ Syringes free of Headspace? Y GS/Senvoy Packing Material: Other: **Bubble Bags** TB on COC? not provided Styrofoam Cubbies Metals: Ν NA **Peanuts HNO3 Preserved? Dissolved Metals Filtered?** Other: N FED EX/ UPS: Was the tracking paper keepable? ESI Clients Only: If circled NO, what is the Tracking number? Digi: #1 #2 Temperature Blank: _____°C not provided Other: _____ **UPS** DHL FED EX Goldstreak N (voas/soils/all unp.) All preserved bottles checked NA (voas/soils/all unp.) All preserved accordingly? N (see NOD) **Project Managers:** Comments: (Initial/Date) PM Reviewed:



1200-Z STORMWATER MONITORING DATA

KINDER MORGAN BULK TERM. 5 Inc.

15550 N LOMBARD ST

Org ID: 25447

Parameter (mg/L)	pH (stu)	TSS	O&G	Cu	Pb	Zn
Benchmark	5.5 - 9.0	130	10	0.1	0.4	0.6

ation Code: 01	Descripti	ion: SAM	PLING MANI	HOLE IN NO	RTH CORNE	R OF PROPER	$T\dot{Y}$ and the $lpha$		
Permit Year	Sample Date	Tester	pН	TSS	O/G	Copper	Lead	Zinc	COD
07-08	2/8/2008	self	7.61	10	< 2.36	0.0037	0.0012	0.021	
07-08	1/8/2008	self	7.38	10	< 2.4	0.0025	< 0.001	0.031	
07-08	11/17/2007	self	6.55	10	< 4.81	0.0057	< 0.001	0.161	
07-08	10/3/2007	self	6.43	. 29	< 4.76	0.0026	0.0008	0.15	
06-07	1/2/2007	self	7.16	< 10	< 4.76	0.00302	< 0.001	0.0336	,
06-07	10/16/2006	self	6.85	24	< 4.76	0.00228	0.00116	0.112	
05-06	2/28/2006	self	8	< 10	< 4.72	< 0.002	< 0.001	0.0238	
05-06	2/2/2006	city	7.4	3	< 5	0.0021	0.00022	0.0232	6
05-06	10/31/2005	self	6.44	56	< 4.72	0.00327	0.00153	0.18	
04-05	3/19/2005	self	7.24	14	< 5	< 0.001	< 0.001	0.0376	
04-05	10/19/2004	self	8.78	16	9.41	0.0049	0.00179	0.0846	
03-04	2/27/2004	self	7.89	< 10	< 5	< 0.002	< 0.001	0.023	
03-04	11/19/2003	self	7.15	< 10	< 5	0.00222	< 0.001	0.0286	
02-03	4/2/2003	self	8.44	< 10	< 5	< 0.002	< 0.001	0.00605	
02-03	1/6/2003	self	7.37	10	< 5	< 0.02	< 0.01	< 0.05	

Revised: 3/23/2009

KINDER MORGAN BULK TERM. 5 Inc.

Stormwater Monitoring Report

Page 1 of 1

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1200-Z STORMWATER MONITORING DATA

KINDER MORGAN BULK TERM. 5 Inc.

15550 N LOMBARD ST

Org ID: 25447

Parameter (mg/L)	pH (stu)	TSS	O&G	Cu	Pb	Zn
Benchmark	5.5 - 9.0	130	10	0.1	0.4	0.6

ition C	ode: 01	Descripti	on: SAM	PLING MANH	OLE IN NO	RTH CORNE	R OF PROPER	ΤŸ		Total State
Permi	it Year	Sample Date	Tester	pН	TSS	O/G	Copper	Lead	Zinc	COD
08-09	j	3/14/2009	self	7.19	20	< 4.8	0.0072	0.0014	0.261	
08-09		12/12/2008	self	6.48	64	< 2.4	0.0188	0.0057	1.02	
08-09		11/10/2008	self	6.42	32.7	< 2.4	0.004	0.001	0.621	
	07-08	2/10/2008	self	6.86		< 2.4	< 0.002	< 0.001	0.209	
	07-08	2/8/2008	self	7.61	10	< 2.36	0.0037	0.0012	0.021	
	07-08	1/8/2008	self	7.38	10	< 2.4	0.0025	< 0.001	0.031	
<u></u>	07-08	11/17/2007	self	6.55	10	< 4.81	0.0057	< 0.001	0.161	
<u> </u>	07-08	10/3/2007	self	6.43	29	< 4.76	0.0026	0.0008	0.15	
06-07		1/2/2007	self	7.16	< 10	< 4.76	0.00302	< 0.001	0.0336	
06-07		10/16/2006	self	6.85	24	< 4.76	0.00228	0.00116	0.112	
	05-06	2/28/2006	self	8	< 10	< 4.72	< 0.002	< 0.001	0.0238	
	05-06	2/2/2006	city	7.4	3	< 5	0.0021	0.00022	0.0232	6
	05-06	10/31/2005	self	6.44	56	< 4.72	0.00327	0.00153	0.18	
04-05		3/19/2005	self	7.24	14	< 5	< 0.001	< 0.001	0.0376	
04-05		10/19/2004	self	8.78	16	9.41	0.0049	0.00179	0.0846	
	03-04	2/27/2004	self	7.89	< 10	< 5	< 0.002	< 0.001	0.023	
	03-04	11/19/2003	self	7.15	< 10	< 5	0.00222	< 0.001	0.0286	
02-03		4/2/2003	self	8.44	< 10	< 5	< 0.002	< 0.001	0.00605	
02-03		1/6/2003	self	7.37	10	< 5	< 0.02	< 0.01	< 0.05	

Revised: 2/25/2010

KINDER MORGAN BULK TERM. 5 Inc.

Stormwater Monitoring Report

Page 1 of 1

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1200-Z STORMWATER MONITORING DATA

KINDER MORGAN BULK TERM. 5 Inc.

15550 N LOMBARD ST

Org ID: 25447

Parameter (mg/L)	pH (stu)	TSS	O&G	Cu	Pb	Zn
Benchmark	5.5 - 9.0	130	10	0.1	0.4	0.6

Loca	tion Code:	01 Descript	ion: SAN	PLING MANH	IOLE IN NO	RTH CORNE	R OF PROPER	TY		English (Program)
	Permit Yea	r Sample Date	Tester	pН	TSS	O/G	Copper	Lead	Zinc	COD
	07-08	2/8/2008	self	7.61	10	< 2.36	0.0037	0.0012	0.021	
	07-08	1/8/2008	self	7.38	10	< 2.4	0.0025	< 0.001	0.031	
	07-08	11/17/2007	self	6.55	10	< 4.81	0.0057	< 0.001	0.161	
_	07-08	10/3/2007	self	6.43	29	< 4.76	0.0026	0.0008	0.15	
	06-07	1/2/2007	self	7.16	< 10	< 4.76	0.00302	< 0.001	0.0336	
	06-07	10/16/2006	self	6.85	24	< 4.76	0.00228	0.00116	0.112	
	05-00	2/28/2006	self	8	< 10	< 4.72	< 0.002	< 0.001	0.0238	
	05-00	2/2/2006	city	7.4	3	< 5	0.0021	0.00022	0.0232	6
	05-06	10/31/2005	self	6.44	56	< 4.72	0.00327	0.00153	0.18	
	04-05	3/19/2005	self	7.24	14	< 5	< 0.001	< 0.001	0.0376	
	04-05	10/19/2004	self	8.78	16	9.41	0.0049	0.00179	0.0846	
	03-04	2/27/2004	self	7.89	< 10	< 5	< 0.002	< 0.001	0.023	
	03-04	11/19/2003	self	7.15	< 10	< 5	0.00222	< 0.001	0.0286	
	02-03	4/2/2003	self	8.44	< 10	< 5	< 0.002	< 0.001	0.00605	
	02-03	1/6/2003	self	7.37	10	< 5	< 0.02	< 0.01	< 0.05	

Revised: 3/23/2009

KINDER MORGAN BULK TERM. 5 Inc.

Stormwater Monitoring Report

Page 1 of 1

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Kinder Morgan Terminals

July 9, 2008

Mr. Dennis Jurries, PE DEQ NWR Storm Water Engineer 2020 SW Fourth Avenue, Suite 400 Portland, OR 97201-4987

Re: Annual Stormwater Report for 2008

Ref: Permit #101377

Dear Mr. Jurries:

Enclosed is the annual Stormwater Report for Kinder Morgan Terminals operations at our Portland Bulk Terminal 5 Facility for the year ending June 30, 2008.

If there are questions, please do not hesitate to call me at the number listed below.

Sincerely yours,

KINDER MORGAN BULK TERMINALS, INC.

Jack Waller

Terminal Manager

Cc:

Regional EHS Manager

File



July 9, 2008

Mr. Timothy P. Dean City of Portland - Environmental Services Water Pollution Control Laboratory Industrial Stormwater Program 6543 N. Burlington Avenue Portland, OR 97203-5452

Re: Annual Stormwater Report for 2008

Ref: Permit #101377

Dear Mr. Dean:

Enclosed is the annual Stormwater Report for Kinder Morgan Terminals operations at our Portland Bulk Terminal 5 Facility for the year ending June 30, 2008.

If there are questions, please do not hesitate to call me at the number listed below.

Sincerely yours,

KINDER MORGAN BULK TERMINALS, INC.

Jack Waller

Terminal Manager

CC:

Regional EHS Manager

File

Permittee Legal Nan	ne:	Kinder Morgan				e No./Facilit	Report -	70613	
Facility Common Na		Portland Bulk Terri	ninals		Reporting		<u>- </u>	2007	to June 30, ²⁰⁰⁸
Facility Location:		15550 North Lomb	ard, Portland, OR 97	7203	Laborator		July 1,	TestAmerica	to June 30, 2008
County:		Moultnomah			 	y ORELAP		OR100021	DE
	pollutants at sam nts). <u>You MUST</u> :	pling point(s) s _i also attach a co	pecified in your	SWPCP. Add r	more sheets if	necessary (e.	g., if more than	4 samples are s form.	collected per pollutant or facility has Coulected per pollutant or facility has Environme Cuality
Name or Number of Sampling Point(s) (group	Sample Date	pH **	Suspended Solids, Total **	Oil and Grease, Total	Copper, Total	Lead, Total	Zinc, Total	E. coli *	* Only applies to landfills accepting septage/biosolids and sewage treatment plants.
data per sampling point)		s.u.	mg/L	mg/L	mg/L	mg/L	mg/L	counts/100 ml	** Effluent limits for these parameters apply to some industri
Outfall 001	10/3/2007	6.43	29	ND	0.0026	0.00076	0.15		see permit, Schedule A.7.
Outfall 001	11/17/2007	6.55	10	ND	0.00568	· ND	0.161		Note 1: Submit this report to the appropriate DEQ regional or agent offices (see below) annually by July 31st. The report
Outfall 001	1/8/2008	7.38	10	ND	0.00253	ND	0.0306		must contain the results of all stormwater monitoring
Outfall 001	2/8/2008	7.61	10	ND		0.00115	0.0206		conducted during the year. If you have a monitoring waiver for one or more of the pollutant(s), please report "M" in the
Geometric Mean	(Note 4)	6.974	13.050	Samuel Control	0.003	0.001	0.062		column(s)-see permit-Schedule B.3.
									Note 2: Non-detects must be reported as "ND" along with the applicable method detection limit in parentheses - e.g. ND (0.001).
	·						-		Note 3: If a stormwater sampling result exceeds any of the
									benchmark values, the permit registrant must, within 30
Geometric Mean	(Note 4)								calendar days of receiving the sampling results, investigate the cause of the benchmark exceedance(s), review the SWPCP and submit an Action Plan for department or agent approval.
									Note 4: For the 4th year of coverage under the permit that became effective on July 1, 2007, report the geometric mean value of the last 4 samples collected for each pollutant parameter, from each sampling point. The geometric mean
Geometric Mean	(Note 4)			75 J. 193					value is automatically calculated if using the Excel version o the DMR form.
- 1			· · · · · · · · · · · · · · · · · · ·						1
									1
Geometric Mean	(Note 4)	5 . June 1							
Permit Bench	mark		. 130 · .	10	0.1.	0.4	0.6	406	
			Na	me/Title Princip	al Executive C	fficer or Author			
(Please Print)									
Telephone: 503-285-4200			Email:	wallerj@kindermo					
I certify, under penalty of law submitted. Based on my inc securate, and complete. I a	quiry of the person of	r persons who ma	inage the system,	or those persons	directly respon	sible for gatherin	g the information,	the information:	qualified personnel properly gather and evaluate the informa submitted is, to the best of my knowledge and belief, true, violations.
	 				<u>-</u> -			Date	

Oil and Grease Sheen and Floating Solids: Oil and Grease Sheen and Floating Solids: Oil and Grease Sheen and Floating Solids: Oil and Grease Sheen and Floating Solids: Oil and Grease Sheen and Floating Solids: When no discharges occur, please write in "No Discharge" for that month. Observations (please note the sampling point(s) name or number) See Attached Portland Bulk Terminals, LLC Visual Monitoring Report August September	William William William Committee to the committee of the
when no discharges occur, please write in "No Discharge" for that month. Observations (please note the sampling point(s) name or number) July See Attached Portland Bulk Temrinals, LLC Visual Monitoring Report September	
July See Attached Portland Bulk Temrinals, LLC Visual Monitoring Report August September	rge allowed. Monthly observation when n. 'No Discharge' for that month.
See Attached Portland Bulk Temrinals, LLC Visual Monitoring Report August September	
September	
September	
October	
November	
Cocember Coc	
January 1/2	
February	
March and the state of the stat	
Third Assertion	
May	
June 20	
For facilities located within the following local jurisdictions, please submit one (1) copy of this report and laboratory results sheet(s) For all other locations, please submit one (1) copy of this report and laboratory results sheet(s)	
and QA/QC documentation to the local jursisdiction annually by July 31st: Clean Water Services Industrial Stormwater 2550 SW Hillsboro, OR 97123 Water Pollution Control Lab 6543 N Burlington Ave. Portland, OR 97203-5452 City of Eugene Industrial Stormwater Section Water Pollution Control Lab 6543 N Burlington Ave. Portland, OR 97203-5452 Western Eugene, OR 97404 Western DEQ Northwest Region Office 2020 SW 4th Ave. Suite 400 Portland, OR 97201 Bend, OR 97702-2237 Phone: (503) 229-5263 Phone: (541) 388-6146 Hours: 8 am - 5 pm DEQ Western Region Office (Benton, Lincoln, Marion, Polk, and Yamhill counties) 1102 Lincoln St. Suite 210 Eugene, OR 97401 Salem, OR 97301-1039 Phone: (503) 378-8240 Hours: 8 am - 5 pm	

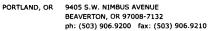
PORTLAND BULK TERMINALS, L.L.C. - Terminal 5

STORMWATER POLLUTION PREVENTION MONTHLY VISUAL MONITORING REPORT

YEAR: 2008

			Pond C Debris, Block Solids & O	age, Floating	Water Aro Free of Solids & O	Floating	Free of E	Surface Excessive Spillage ?	Describe any Corrections taken and the date of completion ONLY
Month	YES	NO	YES	NO	YES	NO	YES	NO	(Attach separate sheet if required)
July - 07	YES	•	YES		YES		YES		
Aug - 07	YES		YES		YES		YES		
Sept - 07	YES		YES		YES		YES		
Oct - 07	YES		YES		YES		YES		
Nov - 07	YES		YES		YES		YES		
Dec - 07	YES		YES		YES		YES		
Jan - 08	YES		YES		YES		YES		
Feb - 08	YES		YES		YES		YES		
Mar - 08	YES		YES		YES		YES		
Apr - 08	YES		YES		YES		YES		
May -08	YES		YES		YES		YES		
Jun - 08	YES		YES		YES		YES		







December 04, 2007

Katrina Greene Kinder Morgan Bulk Terminals: T5-Portland 15550 N. Lombard Terminal 5 Portland, OR 97203

RE: Stormwater

Enclosed are the results of analyses for samples received by the laboratory on 11/19/07 09:00. The following list is a summary of the Work Orders contained in this report, generated on 12/04/07 18:01.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	<u>ProjectNumber</u>
PQK0679	Stormwater	NA

TestAmerica Portland

Brenn L. Com

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory.





PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Project Manager:

Stormwater

15550 N. Lombard Terminal 5 Portland, OR 97203 Project Number: NA

Katrina Greene

Report Created: 12/04/07 18:01

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
Outfall 001	PQK0679-01	Water	11/17/07 11:30	11/19/07 09:00

TestAmerica Portland

Bean L. Come

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Kinder Morgan Bulk Terminals: T5-Portland

PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Project Name: Stormwater

15550 N. Lombard Terminal 5 Project Number:

Portland, OR 97203 Project Manager: Katrina Greene

Report Created: 12/04/07 18:01

Oil and Grease Analysis per EPA Method 1664

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQK0679-01 (Outfall 001)		W	ater		Sam	pled: 11/1	17/07 11:30			
Oil & Grease	EPA 1664	ND		4.81	mg/l	1x	7120007	12/03/07 10:30	12/03/07 16:06	

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PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Project Manager:

Stormwater

Project Number:

NA

Katrina Greene

Report Created: 12/04/07 18:01

Total Metals per EPA 200 Series Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQK0679-01 (Outfall 001)		Wa		Samp	oled: 11/1	7/07 11:30				
Copper	EPA 200.8	0.00568		0.00200	mg/l	lx	7110842	11/21/07 10:45	11/24/07 04:25	-
Lead	n	ND		0.00100	"		n	п	n	
Zinc	n	0.161		0.00500	н		н	н	11/27/07 02:53	

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PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: Project Manager:

Katrina Greene

Report Created: 12/04/07 18:01

Conventional Chemistry Parameters per Standard Methods

TestAmerica Portland

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQK0679-01 (Outfall 001)		Wa	iter		Samj	pled: 11/1	7/07 11:30			
Total Suspended Solids	SM 2540D	10.0		10.0	mg/l	lx	7110848	11/21/07 11:05	11/21/07 17:23	

TestAmerica Portland

Been L Come

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PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

THE LEADER IN ENVIRONMENTAL TESTING

TestAmerica

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: Project Manager: NA

Katrina Greene

Report Created:

12/04/07 18:01

Field Testing of Conventional Chemistry Parameters per APHA/EPA Methods

TestAmerica Portland

Analyte		Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PQK0679-01	(Outfall 001)		Wa	iter		Samp	led: 11/1	7/07 11:30			
рН		EPA 150.1	6.55			pH Units	1x	7110835	11/17/07 11:35	11/17/07 11:40	

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PORTLAND, OR 9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name:

Stormwater

Project Number: Project Manager: NA

Katrina Greene

Report Created: 12/04/07 18:01

Oil and Grease Analysis per EPA Method 1664 - Laboratory Quality Control Results

			Te	stAmeric	a Portland	<u> </u>							
QC Batch: 7120007	Water F	Preparation N	1ethod: Od	&G prep	CE								
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike % Amt REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (7120007-BLK1)								Extracted:	12/03/07 08	:30			
Oil & Grease	EPA 1664	ND		5.00	mg/l	lx						12/03/07 16:06	
LCS (7120007-BS1)					_			Extracted:	12/03/07 08	:30			
Oil & Grease	EPA 1664	37.3			mg/l	1x		40.0 93.2%	(78-114)			12/03/07 16:06	

TestAmerica Portland

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9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

<u>TestAmerica</u>

THE LEADER IN ENVIRONMENTAL TESTING

Kinder Morgan Bulk Terminals: T5-Portland

15550 N. Lombard Terminal 5

Portland, OR 97203

Project Name: Stormwater

Project Number: N

Project Manager: Katrina Greene

Report Created: 12/04/07 18:01

Total Metals per EPA 200 Series Methods - Laboratory Quality Control Results

		•	7	ΓestAmerica	Portland	l .	,			un ja	· · v			
QC Batch: 7110842	Water P	reparation Meth	od: E	PA 200/30	05									
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits) Analyzed	Notes
Blank (7110842-BLK1)								Exti	acted:	11/21/07 10	:45			_
Соррег	EPA 200.8	ND		0.00200	mg/l	1x							11/22/07 01:33	
Lead	н	ND		0.00100	10	*							**	
Zinc	Ħ	ND		0.00500	**	n							*	
LCS (7110842-BS1)						_		Exti	acted:	11/21/07 10	:45			_
Copper	EPA 200.8	0.0489		0.00200	mg/l	lx		0.0500	97.9%	(85-115)			11/22/07 01:38	
Lead	**	0.0463		0.00100	и	,,		"	92.5%	•			*	
Zinc	"	0.0483		0.00500	19	н		•	96.5%	н			19	
Duplicate (7110842-DUP1)				QC Source:	PQK0574-	01		Exti	acted:	11/21/07 10	:45			
Copper	EPA 200.8	ND		0.00200	mg/l	lx	ND				10.7%	(20)	11/22/07 01:48	
Lead	•	ND		0.00100			ND				NR	"	**	
Zinc	**	ND		0.00500	**	"	ND				39.3%	н	**	R
Matrix Spike (7110842-MS1)				QC Source:	PQK0574-	-02		Exti	acted:	11/21/07 10	:45			_
Copper	EPA 200.8	0.0501		0.00200	mg/l	lx	0.000608	0.0500	98.9%	(75-125)			11/22/07 01:57	
Lead	**	0.0467		0.00100	**		ND	**	93.4%	0			*	
Zinc	"	0.0516		0.00500	**	"	0.00115	•	101%	(70-130)			**	
Matrix Spike (7110842-MS2)				QC Source:	PQK0574-	03		Extr	acted:	11/21/07 10	:45			
Copper	EPA 200.8	0.0561		0.00200	mg/l	lx	0.00790	0.0500	96.4%	(75-125)			11/22/07 02:07	
Lord	,,	0.0458		0.00100	*	**	NID	н	91.6%	**			н	
Lead		0.0438		0.00100			ND		91.070					

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PORTLAND, OR

9405 S.W. NIMBUS AVENUE BEAVERTON, OR 97008-7132 ph: (503) 906.9200 fax: (503) 906.9210

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Kinder Morgan Bulk Terminals: T5-Portland

Project Name:

Stormwater

15550 N. Lombard Terminal 5 Portland, OR 97203

Project Number: NA
Project Manager: Katı

Katrina Greene

Report Created: 12/04/07 18:01

Conventional Chemistry Parameters per Standard Methods - Laboratory Quality Control Results

,			Т	estAmeric	a Portlan	d (
QC Batch: 7110848	Water F	Preparation N	lethod: G	eneral Pro	eparation	1	-							
Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limit	s) Analyzed	Notes
Blank (7110848-BLK1)						110 11000		Extra	icted:	11/21/07 11	:05			
Total Suspended Solids	SM 2540D	ND		10.0	mg/l	1 x							11/21/07 17:23	
Blank (7110848-BLK2)		<u></u>						Extra	icted:	11/21/07 11	:05			
Total Suspended Solids	SM 2540D	ND		10.0	mg/l	lx							11/21/07 17:23	
LCS (7110848-BS1)								Extra	cted:	11/21/07 11	:05			
Total Suspended Solids	SM 2540D	60.0		10.0	mg/l	1x		50.0	120%	(80-120)			11/21/07 17:23	
LCS (7110848-BS2)								Extra	cted:	11/21/07 11	:05			
Total Suspended Solids	SM 2540D	50.0		10.0	mg/l	lx		50.0	100%	(80-120)			11/21/07 17:23	
Duplicate (7110848-DUP1)				QC Source:	PQK0765	-01		Extra	cted:	11/21/07 11	:05			
Total Suspended Solids	SM 2540D	ND		10.0	mg/l	1x	ND				NR	(20)	11/21/07 17:23	
Duplicate (7110848-DUP2)				QC Source:	PQK0765	-02		Extra	cted:	11/21/07 11	:05			
Total Suspended Solids	SM 2540D	20.0		10.0	mg/l	lx	20.0				0.00%	(20)	11/21/07 17:23	

TestAmerica Portland

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TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

Kinder Morgan Bulk Terminals: T5-Portland

Project Name: Project Number: Stormwater

NA

Portland, OR 97203

15550 N. Lombard Terminal 5

Project Manager:

Katrina Greene

Report Created: 12/04/07 18:01

Notes and Definitions

Report Specific Notes:

R4 - Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.

Laboratory Reporting Conventions:

DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.

ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).

NR/NA _ Not Reported / Not Available

dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.

wet Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported

on a Wet Weight Basis.

RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).

MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.

MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B.
 *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.

- Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.

Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.

Electronic - Electronic Signature added in accordance with TestAmerica's Electronic Reporting and Electronic Signatures Policy.

Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Portland

Dil

Limits

Reporting -

Been L Come

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report shall not be reproduced except in full, without the written approval of the laboratory



Test America ANALYTICAL TESTING CORPORATION

CHAIN OF CUSTODY RECORD X Portland, OR

Work Order #
PQK0679

						_
TURN	AROL	I DNL	REQL	JEST:	10	DA

Client Name/Account #	: Kinder-M	organ T	-5														ļ٦	ΓUI	RN	ΑF	२०।	UN	D F	REC	JUE	ST:	10	DA	Y.
Address	15550 N	Lombard	d												-														
City/State/Zip	: Portland,	OR 972	203												R	еро	rt T	o:	Katr	ina	ı Gr	eer	ne						
Project Managers	Katrina G	ireene													In	voic	e T	o: _											
Telephone Number:	503-285-4	200 X 1	5		 Fax N	No.:	50	3-2	85-	7733																			
Sampler Name: (Print)	Lawrence	Spang	ler											_				-	Stor										
Sampler Signature															F	Proj	ect	#:											
Гад ID: 071					Г		Pre	ese	rvat	ive		T	ŀ	Matrix	<u>. </u>	T				-	\nal	yze	For:						=
Sample ID / Description	Date Sampled	Time Sampled	No. of Containers	Grab		250mL Poly Unpreserved	250mL Poly w/Nitric Acid	IL Glass w/Hydrochloric Acid				Stormwater				00	133	zn, cu, ro	O&G	FI-PH: 0.33	Sampling-Grab								
Outfall 001	17-Nov	1130	4	х	十	٦	X	Ţ	\Box	十	t	X	\dashv	+	\Box	_			x			十	\dashv	7	十	十	+1	十	十
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special Instructions:																I		-	aha	rat	2004			ents:	\perp	\perp			\perp
pecial instructions:																										ceir	ot: 0.	.1c	
Received by TestAmerica:	Da			me	 														. 0.1	<u>. ~ ``</u>		<u></u>	<u>- </u>			<u>,p</u>		<u> </u>	
arry Spangler	11/17/ Da			130 me																									
IN LAR	11/19/			00																									

	Tes	icmt-5 KMT-4 Models Cooler ID(s)							
Received by:	Unpacked by:	Logged-in by:	Work Order No. <u>PQ</u>	10679	45 SC411165 2 07/				
(section A)	*(section B)	· ····································	Client: Kinder-M	lorgan	T-5				
Date: 11-19-07	Date: 1.11/2.7	Date: 111907	Project: StOVMV						
Time: 0900	Initials:	Initials		erature out o	f range:				
Initials: 4.05					_				
***ESI Clients (see Section	CI	_			Not enough Ice No Ice Ice Melted Win 4 Hours				
Cooler Temperature (IR):	2. / °C plastic glas	NA (oil/air samples, ES	I client) Temperature Blank:	°C	Other				
A Custody Seals: (#	<u>ل</u>		B Sample Sta	atus:					
Signature: Y N Dated:	Receiv	ed from:	(If N circled, se	e NOD)					
	IVECEIA			1					
Container Type:		X TA Courier	General:						
<u>Container Type.</u> _ ★ #Cooler(s	-\ -\	Senvoy	Intact?		N				
#Box(s)	>)	UPS	# Containers Match COC?	Y	N none given				
None (#Other:	Fed Ex	IDs Match COC?	(Y)	N				
		Client	For Analyses Requested:						
Coolant Type:		TDP	Correct Type & Preservation?	\bigcirc	N				
Gel Ice		DHL	[
)	SDS	Adequate Volume?		N				
None		Mid-Valley	Within Hold Time?	(Y)	N				
		GS/TA	Volatiles/ Oil Quality:						
Packing Material:		GS/Senvoy	VOAs/ Syringes free of Headspac	e? Y	N (NA)				
Bubble B	ags	Other:	TB on COC? not provided	Y	N (NA)				
(n Cubbies	-	Metals:	•					
 None (Other:)	!	HNO3 Preserved?	\D	N NA				
,		ı	Dissolved Metals Filtered?	Y					
			Dissolved Wetais I litered :	<u>'</u>	N NA				
*** <u>ESI Clients Only</u> :			FED EX/ UPS: Was the tracking paper I	reepable?	YES NO				
Temperature Blank:	*C not provided	:	If circled NO, what is the Tracking nu	mher?					
All preserved be		NA (voas/soils/all unp.)	•	·	Othor				
All preserved ac			TEDEN OF DAL GOR	Istreak	Other:				
	Project Managers:								
Comments:									
)	PM Reviewed BLC 11-2	21-07	ļ	:				